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ABSTRACT

In the third of seven volumes on a national survey of individualized education programs (IEPs) for handicapped children, research findings are summarized. Findings are organized according to 10 basic study questions and touch on the following topics: basic content of IEPs, personnel involved in developing and approving IEPs, special education and related services specified in IEPs, the informativeness and internal consistency of IEPs, and service settings for special services. Among major findings are that 95% of the nearly 3 million handicapped students in public schools had IEPs; slightly more than one third of the IEPs contained all of the 11 information items required by the Act; a wide range of school personnel were involved in the development and approval of IEPs; and that based on a global view of the IEP document, about 40% of the IEPs were informative and internally consistent. Extensive appendixes present supporting data for each of the research questions. (CL)

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FINAL REPORT

A NATIONAL SURVEY OF INDIVIDUALIZED EDUCATION PROGRAMS (IEPs) FOR HANDICAPPED CHILDREN

Volume III

BASIC SURVEY FINDINGS

by

John N. Pyecha, Project Director
J. Lamarr Cox, Associate Project Director
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Anne Hocutt
Jay Jaffe
John Pelosi
Ronald Wiegerink

Prepared for

Office of Special Education
Department of Education
under
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RESEARCH TRIANGLE PARK, NORTH CAROLINA 27709

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Preface and Acknowledgements

A National Survey of Individualized Education Programs (IEPs) for Handicapped Children, the final report of the research conducted by the Research Triangle Institute under USOE Contract Number 300-77-0529, is presented in five volumes:

Volume I, *Executive Summary of Methodology and Major Findings*
Volume II, *Introduction, Methodology, and Instrumentation*
Volume III, *Findings for the Basic Survey*
Volume IV, *Findings for the Retrospective Longitudinal Substudy*
Volume V, *Findings for the State/Special Facility Substudy*.

The authors, in preparing Volume III of this report, wish to express their special appreciation for the cooperation and contributions of a number of people, both within and outside the Research Triangle Institute (RTI).

Valuable professional guidance was provided by Drs. Linda Morra and Nancy Safer, Office of Special Education. Dr. Morra served as the OSE Project Officer during the design and data collection phases of the study; Dr. Safer served as the Project Officer during the report preparation phase.

The following persons made contributions to the sample design, data processing, IEP coding, data analysis, and report preparation activities of the study:

Ms. Paula Bell (University of North Carolina at Chapel Hill): IEP rater for the Informativeness/Internal Consistency Study
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Ms. Annette Born: Survey field supervisor
Mr. Dick Boytos: Survey field supervisor
Mr. Wayne Bradburn: Field staff training and supervision
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Ms. Hilda Zimmerman: Survey field supervisor

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Chapter 1

Introduction

I. GENERAL

The National Survey of Individualized Education Programs (IEPs) for Handicapped Children was conducted in the spring of 1979 by the Research Triangle Institute (RTI), under contract to the Bureau of Education for the Handicapped (now the Office of Special Education within the Department of Education), USOE. The methodology and findings of this national survey, which consists of a Basic Survey and two companion substudies, are described in five volumes. The IEPs collected and analyzed for the Basic Survey were prepared for students, ages 3-21, who were enrolled in LEA-administered public schools on 1 December 1978.

Volume I is an executive summary of the survey methodology and findings. Volume II describes the background, objectives, methodology, and instrumentation. Volumes IV and V present the findings of the Retrospective Longitudinal Substudy and State/Special Facility Substudy, respectively. This volume, Volume III, describes the properties and contents of IEPs prepared for the target population of the Basic Survey.

This chapter describes the organization of Volume III.

II. ORGANIZATION OF VOLUME III

The Basic Survey was designed to answer the following ten general questions (the specific questions associated with each of these general questions are presented in Appendix A):

Question 1: What do IEPs look like?
Question 2: What kinds of information do IEPs contain?
Question 3: How is information presented in IEPs?
Question 4: Who participates in the development and approval of IEPs?
Question 5: What types of special education and related services are specified in IEPs?
Question 6: How informative and internally consistent are IEPs?

Question 7: In what service settings, and for what proportion of the academic week, do students receive special education services?

Question 8: What are the characteristics of students who have IEPs and are enrolled in public schools, and of the schools and school districts in which they are enrolled?

Question 9: How do the types, service settings, and amounts of special education services specified in IEPs vary by selected student, school, and school district characteristics?

Question 10: How do the formats, properties, contents, and development processes of IEPs vary by selected student, school, and school district characteristics?

The results and major findings of the Basic Survey are organized and presented as responses to these ten general questions in the following chapters, as outlined in Table 1.1. Each chapter contains, as a final section, a summary of the major findings presented in the chapter.

Table 1.1

LINKAGE BETWEEN STUDY QUESTIONS AND CHAPTERS IN WHICH ADDRESSED

Study Questions	Chapters
1	3
2	4
3	4
4	5
5	6
6	7
7	8
8	2
9	6 and 8
10	3, 4, 5, and 7

Chapter 2 presents a rather detailed description of the national population of handicapped children who were served in LEA-administered public schools.

The schools and school districts in which these children were enrolled are also described.

Chapters 3 and 4 describe the basic properties and content areas of IEPs.

Chapter 5 describes the personnel involved in developing and approving IEPs.

In Chapter 6, the special education and related services specified in the IEPs of students across the nation are described.

Chapter 7 discusses the informativeness and internal consistency of IEPs.

Chapter 8 describes the amount of, and service settings for, the special services received by students.

Chapters 2-8 also contain a discussion of findings for subpopulations, as defined by selected student, school, and school district characteristics.

Chapter 9 presents a summary of major findings and a discussion of resulting conclusions. For the most part, the conclusions of the Basic Survey result from findings that cut across several chapters; as a result, conclusions are presented in the final chapter as opposed to being discussed in earlier chapters.

The proportions, means, and other statistics presented and discussed in these chapters are population estimates based on weighted sample data. The estimated standard errors associated with each of these population estimates are presented in appended tables. However, to preclude the excessive use of such qualifiers as "about" or "approximately," these estimates are discussed throughout this report as though they are precise population values. Although these population estimates and associated standard errors are reported to the nearest tenth of a whole number in the appended tables, they are rounded to the nearest whole number when discussed or presented in the body of the report.[1]

With one exception, all supporting materials have been appended separately by chapter; i.e., materials referenced in Chapter 1 have been placed in Appendix A, those referenced in Chapter 2 have been placed in Appendix B, etc. The exception is Appendix I, which contains a description of the major reporting variables used throughout this volume. Appendix I also notes the sample sizes for the reporting groups within each major reporting variable. Subpopulations with sample sizes of less than 25 also are noted in tabular presentations.

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[1] Note in rounding that if the first digit to be dropped is 5, the last digit retained is increased by 1 if it is odd but is kept unchanged if it is even; for example, 7.5 becomes 8 and 6.5 becomes 6. [National Center for Education Statistics, NCES guidelines for tabular presentation. Washington, D.C.: National Center for Education Statistics (USOE, HEW), August 1974.]

Within each chapter, findings pertinent to each topic are presented first for the Basic Survey population, followed by related findings for selected subpopulations. As noted above, the reporting variables, i.e., the variables which define the subpopulations for which results are reported separately, are defined in Appendix I. Since budget constraints precluded the reporting of each survey finding by all reporting variables, the reporting variable(s) used to present specific findings were selected on the basis of: (a) BEH information needs, as expressed by BEH staff; and (b) the extent to which specific findings were expected to vary over the groups or levels defined for the reporting variable (e.g., the extent to which the page lengths of students' IEPs were expected to vary when classified by the enrollment size--small, medium, or large--of the district in which the student was enrolled).

As stated in Volume II, Chapter 7, of this report, the .05 level was selected for determining the statistical significance of between-group comparisons. Differences that are significant at the .10 level but not at the .05 level (actually, differences of the magnitude of 1.5 to 2 standard errors) are interpreted as being "suggestive" of significant differences.

Chapter 2

What Are the Characteristics of Basic Survey Students, Schools, and School Districts?

The target population for the Basic Survey includes all children in 47 of the 48 contiguous United States (New Mexico is excluded) and the District of Columbia who were, as of 1 December 1978:

a) Between the ages of 3-21, inclusive.

b) Enrolled in a public elementary or secondary school administered by a local education agency.

c) Classified by their place of enrollment as being handicapped and receiving special education and related services.

IEPs and student descriptive information were collected and analyzed only for that portion of the target population that had IEPs.

This chapter focuses primarily on Basic Survey question VIII: What are the characteristics of the students who have IEPs and are enrolled in public schools, and of the schools and school districts in which they are enrolled? Descriptive information is also presented on the number of handicapped students who were, as of 1 December 1979, not being served.

This chapter consists of three sections. The first section summarizes student characteristics; the second and third sections summarize the characteristics of enrolling schools and school districts, respectively. Supporting materials for this chapter are contained in Appendix B. All reported measures are population (or when noted, subpopulation) estimates based on weighted sample data.

I. STUDENT CHARACTERISTICS

Students in the Basic Survey are described in terms of: (a) whether or not they received special education and related services; (b) the source of funding for their services; (c) general characteristics including their grade level, age, race, and sex; and (d) the nature and severity of their handicap(s).

A. Number and Percent Receiving Special Services

Based on data reported by principals in the Basic Survey sample, approximately 3 million students, ages 3-21, were estimated as being served on 1 December 1978. As specified in the definition of this target population, this estimate includes only those students who were enrolled in public elementary and secondary schools that are administered by local education agencies in 47 of the 48 continental United States. This figure would include students enrolled in schools operated by cooperative districts. Approximately 4 percent (about 125,937) of these 3 million handicapped children were served in special schools, as compared to 96 percent (about 2,873,839) who were served in regular schools. (See Appendix B, Table B.1.)

Ninety-five percent of the students in the Basic Survey population had IEPs on 1 December 1978; that is, only 5 percent of these students were being served on 1 December 1978 without a completed IEP. Ninety percent of the students served in special schools had IEPs, as compared to 95 percent in regular schools. However, this difference is not statistically significant. (See Appendix B, Table B.1.)

School principals were asked to provide general information about plans for preparing IEPs for those handicapped students, without IEPs, who were receiving special education and related services on 1 December 1978. However, responses were obtained for only 55 percent of the students without IEPs.[1] Given a response rate of only 55 percent, the following findings should be interpreted with caution:[2]

1) IEPs were not prepared for 42 percent of these students because they were served with regular Title I funds and "IEPs were not required."
2) For 8 percent of these students, it was reported that committees had started the IEPs but had not yet completed them.
3) For 3 percent of the students, it was reported that an IEP will be prepared as soon as an assessment of student needs is completed.

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[1] Included as nonresponses were data from eight sample schools in which the principals' responses as to the number of handicapped students enrolled in their schools (with and without IEPs) were inconsistent with data obtained directly from classroom rosters.

[2] The percents reported are based on the 55 percent of students for whom information was available.

4) The remaining 47 percent of the students did not have IEPs for a variety of "other" reasons; e.g., students withdrew from school or graduated, students were in special vocational/academic programs for which IEPs were not required, IEPs were lost, and special education teachers left before IEPs were completed and the program was disbanded.

One possible explanation of these findings is that some school personnel may have misunderstood the intent of P.L. 94-142 that an IEP be prepared for all handicapped students, regardless of the funding source for the services they receive, and that the IEP be in effect before special education and related services are provided.[3]

Unless otherwise noted in the remainder of this volume (including all appendixes), 2,821,899, the estimated number of students in the Basic Survey population who had IEPs on 1 December 1978, is the base for computing all percents and proportions used to describe the population of Basic Survey students and their IEPs. This population estimate is based on a sample of 2,657 students; 2,126 of these students were enrolled in regular schools and 531 were enrolled in special schools.

B. Funding of Special Services

School principals were asked to specify the source of funding for the special education services provided to each sample student. For this purpose, funding sources were defined as follows:

1) P.L. 94-142: student's special education program was provided by funding through P.L. 94-142 solely or in combination with other sources.
2) Regular Title I: student's special education program was funded solely by Regular Title I funds.
3) P.L. 89-313: student's special education program was funded solely by P.L. 89-313 funds.
4) Other: student's special education program was funded by other sources or by a combination of sources exclusive of P.L. 94-142.

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[3] "Informal Letter to State Directors of Special Education, State Part B Coordinators, and State P.L. 89-313 Coordinators: Policy Paper on Individualized Education Programs (IEPs)." DAS Information Bulletin, Number 64. Washington, D.C.: Bureau of Education for the Handicapped (USOE, HEW), May 23, 1980.

School principals reported that 85 percent of the students received services funded at least partially by P.L. 94-142, 10 percent of the students received services funded by a combination of sources other than P.L. 94-142, 2 percent of the students received services funded entirely by P.L 89-313, and the funding source could not be determined for the remaining 2 percent. The findings, presented separately for students served in regular and special schools, show that services for a larger percent of students enrolled in special schools than in regular schools were funded solely by P.L. 89-313, and a smaller percent of students in special schools received services funded by P.L. 94-142 than did students in regular schools. (See Appendix B, Table B.2.)

When funding sources were compared between the four age-level groupings (3-5, 6-12, 13-15, and 16-21), none of the observed differences were large enough to be suggestive of true differences.

C. Grade Level, Age, Race, and Sex

Information about the student's age, grade level, race, and sex was obtained from the teachers most familiar with the student's IEP.

1. Grade Level

Table B.3 in Appendix B presents the distribution of students with IEPs by specific grade levels. Table 2.1 summarizes this distribution by grade-level groupings. Note that grade-level information was not available for 14 percent of the students, presumably because these students were served in ungraded classes.

2. Age and Sex

The distribution of handicapped students with IEPs is presented by specific age levels in Table B.4 of Appendix B. This distribution is summarized in Table 2.2 by the four broad age-level groupings that were selected to correspond roughly to preschool (ages 3-5), elementary school (ages 6-12), middle/junior high school (ages 13-15), and senior high school (ages 16-21) students. If one assumes that 11 percent of the ungraded students in Table 2.1 were in fact enrolled in the equivalent of grades 1-6, and that the remaining 3 percent were in grades 10-12, the age distribution fits nicely to these four school groupings; e.g., 63 percent of the students are in the 6-12 age range (Table 2.2) as compared to 63 percent in elementary school grades 1-6 (Table 2.1 with 11 percent of the ungraded students added to the 52 percent shown in grades 1-6).

Table 2.1

DISTRIBUTION OF STUDENTS BY GRADE-LEVEL GROUPINGS

Grade Level	Percent
Pre-K and K	5
1-3	29
4-6	23
7-9	19
10-12	10
Ungraded/ Undetermined	14
Total	100

Table 2.2

STUDENTS WITH IEPs, BY AGE AND SEX
(In percents)

Age Level	Sex		Total
	Male	Female	
3-5	2	2	4
6-12	40	23	63
13-15	14	7	20[a]
16-21	9	4	13
Total	64[a]	36	100

[a] Detail does not add to total because of rounding.

Also included in Table 2.2 is a cross classification of these students by sex. As shown in this table, about 1.75 times as many male students had IEPs than did female students. In general, this relationship holds across grades. The results presented in Table 2.2 also show that a little less than two-thirds (63 percent) of the students with IEPs were in the 6-12 age group, and one-fifth were in the 13-15 age group. (See Appendix B, Table B.5.)

Table 2.3 presents an estimate of the distribution of 3- to 21-year-old students who were enrolled in regular school (nursery school, kindergarten, elementary school, and high school) based on the October 1977 Current Population Survey.[4] Although the estimates presented in Table 2.3 are based on enrollment data from a different school year and from a different sample than those presented in Table 2.2, they are adequate for providing insight as to whether these subpopulations appear to be over- or underrepresented with respect to the receipt of special education services.

Table 2.3

STUDENTS ENROLLED IN GRADES PRESCHOOL-HIGH SCHOOL IN OCTOBER 1977, BY AGE AND SEX[a]

(In Percents)

Age Level	Sex		Total
	Male	Female	
3-5	5	5	10
6-12	25	24	49
13-15	12	12	24
16-21	9	8	16[b]
Total	51	49	100[b]

[a] Computed from population estimates presented in Table 15 in: School Enrollment--Social and Economic Characteristics of Students: October 1977. Current Population Reports, Series P-20, No. 333. Washington, D.C.: U.S. Department of the Commerce, Bureau of the Census, February 1979.

[b] Detail does not add to total because of rounding.

A comparison of the findings in Tables 2.2 and 2.3 indicate that males are overrepresented and females are underrepresented in special education programs. Most of the overrepresentation of males occurs in the 6-12 age level, whereas females tend to be underrepresented in both the 13-15 and 16-21 age levels. Both sexes are underrepresented in the 3-5 age level. A comparison of the age-level distributions for the two sexes combined indicates that the 6-12 age level is overrepresented and that the 3-5 and 16-21 age levels may be slightly underrepresented. (The reader is reminded that both sets of data are estimates based on national samples.)

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[4] School Enrollment--Social and Economic Characteristics of Students: October 1977. Current Population Reports, Series P-20, No. 333. Washington, D.C.: U.S. Department of Commerce, Bureau of the Census, February 1979, pp. 46-48.

3. Race and Sex

Seventy-five percent of the students were white, 19 percent were black, 4 percent were Hispanic, 2 percent were American Indian or Alaskan Native, and a little less than 1 percent were Asian or Pacific Islander. The distribution of males and females within the white and black race categories approximates the distribution within the combined population (i.e., 64 percent male, 36 percent female); however, the percent of males in each of the other three race categories is about 50, which is slightly less than the percent of males in the combined population. (See Appendix B, Table B.6.)

Bureau of Census data related to school enrollments in October 1977 are divided into three groups on the basis of race: white, black, and "other." The last category includes Indians, Japanese, Chinese, and any other race except white and black. These data show the following distribution of students who were in the 3-21 age range and enrolled in regular schools in October 1977: white (83 percent), black (15 percent), and other (2 percent).[5,6] These estimates suggest that whites may be underrepresented and blacks slightly overrepresented in special education programs; however, a direct comparison of the two distribution is not possible since the Hispanic students with IEPs (4 percent) may be in any one of the three census race groups.

D. Nature and Severity of Handicap

1. Nature of Handicap

Figure 2.1 shows the distribution of students by type of handicapping condition(s), as specified by the students' teachers. Note that the percents in this figure total more than 100 since some students had two or more handicapping conditions. The three most prevalent handicapping conditions were learning disabilities (41 percent), speech impairments (33 percent), and

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[5] Percents do not total 100 because of rounding.

[6] Ibid., pp. 7-9.

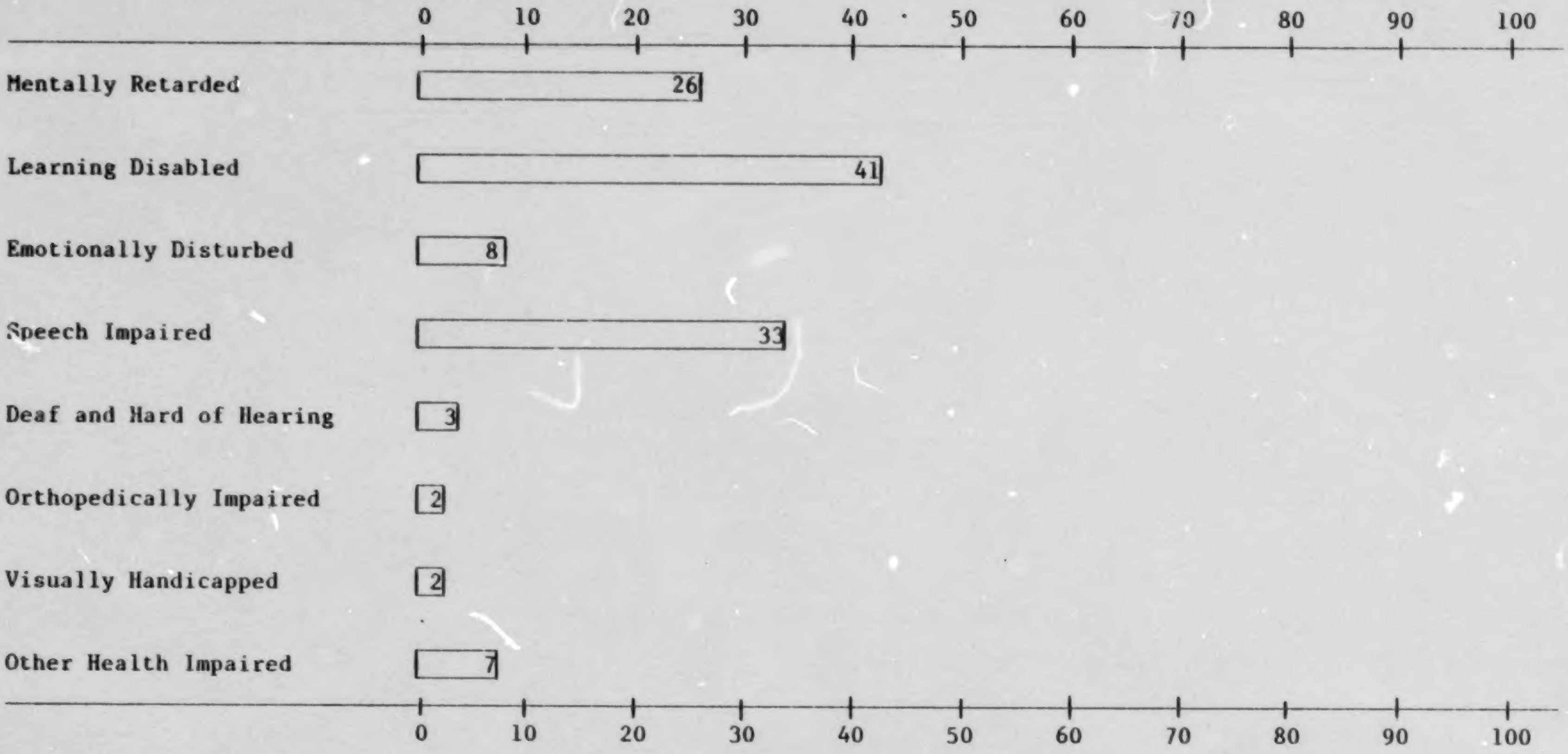

Figure 2.1. Distribution of Students with IEPs, by Nature of Handicapping Condition.[a]

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[a] Percents total more than 100 because some students have multiple conditions.

mental retardation (26 percent). None of the remaining five conditions occurred in more than 8 percent of the students. (See Appendix B, Table B.7.)

Whereas Figure 2.1 describes the types of handicapping conditions found among the target population, Figure 2.2 describes the target population in terms of whether they had single or multiple handicapping conditions. Figure 2.2 also indicates the nature of handicapping conditions for those students who had only one handicap. As shown in Figure 2.2, 84 percent of the students had a single handicapping condition; the remaining 16 percent had multiple conditions. About three-fourths of all the handicapped students had single handicaps in one of three areas; i.e., 30 percent were learning disabled, 24 percent had speech impairments, and 20 percent were mentally retarded. (See Appendix B, Table B.8.)

Approximately four-fifths of the students with multiple handicaps had two conditions; most of the remaining one-fifth had three conditions. As would be expected, a larger percentage of the students enrolled in special schools than in regular schools had multiple handicaps (40 percent versus 16 percent, as computed from the results presented in Appendix B, Table B.9).[7]

About three-fourths of all the students who had combinations of only two conditions had one of the following four combinations: learning disabled and speech impaired (22 percent); learning disabled and emotionally disturbed (22 percent); mentally retarded and speech impaired (21 percent); and mentally retarded and learning disabled (9 percent). The remaining 26 percent had one of 18 other combinations, none of which occurred in more than 5 percent of the students. (See Appendix B, Table B.10.)

Also presented in Table B.10 is the distribution of these "pairs of handicapping conditions" by school type. As reflected in Table B.10, the distribution of these pairs among students differs significantly between special and regular schools. The major difference is that about 40 percent of the special school students with only two handicapping conditions were mentally retarded and speech impaired, as compared to about 19 percent of the regular school students. Also, 40 percent of the special students have "other"

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[7] These percents were computed from Table B.9 in Appendix B by summing the percents of students with two or more handicaps in each school type and dividing this figure by the total percent of students in the school type; e.g., for regular school students, $\frac{11.9 + 2.2 + 0.9}{96.0} = 0.156 = .16$.

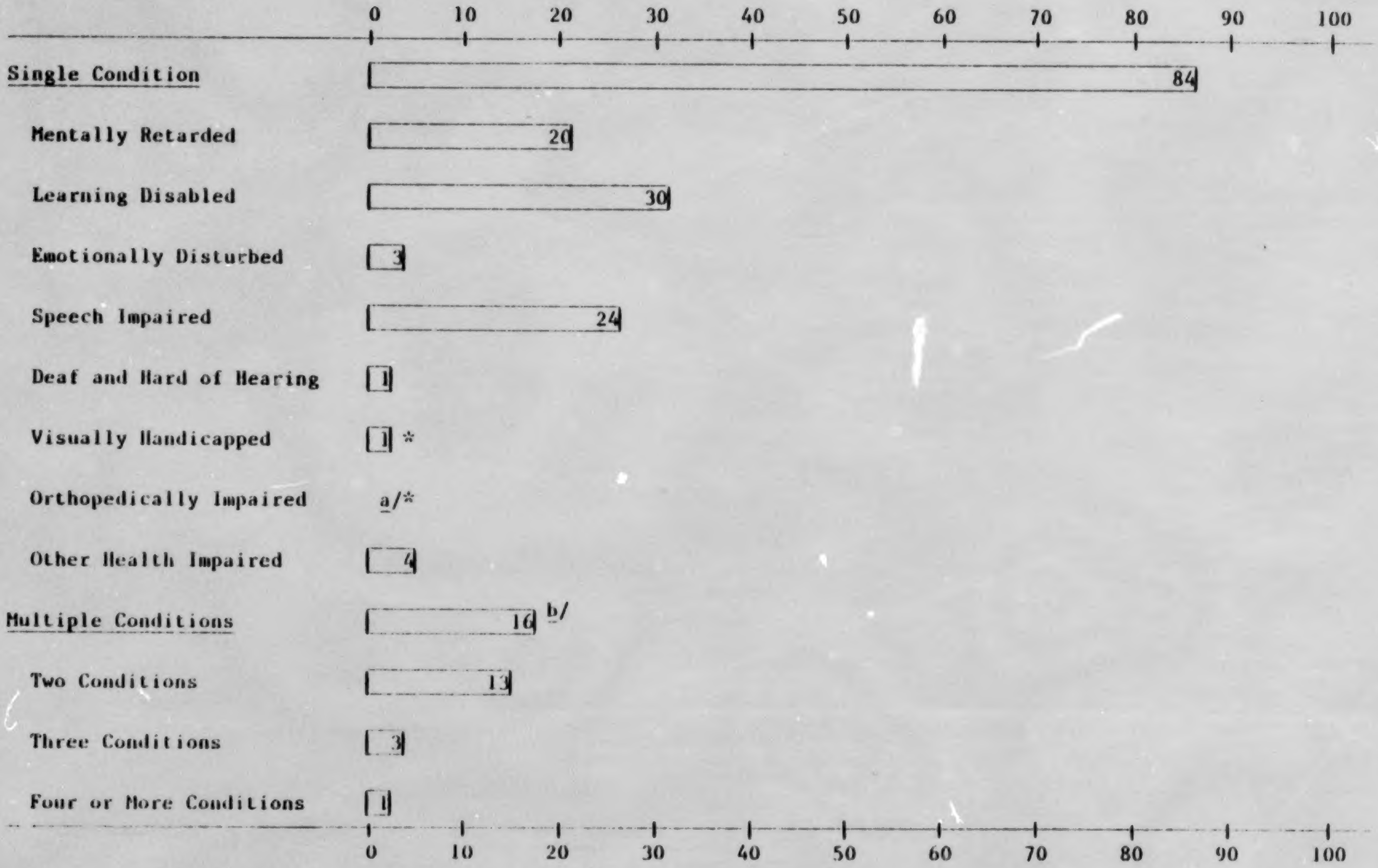

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Figure 2.2. Percent of Students, by Nature of Single and Multiple Handicapping Condition.

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* This group has an estimated sample sizes of less than 25.

a/ Less than .5.

b/ Detail does not add to total because of rounding.

combinations, as compared to about 25 percent in the regular schools. (These percents were computed from the data in Table B.10.)

The percent of students with various types of handicaps are presented in Appendix B by age levels (Table B.11), by sex (Table B.12), by race (Table B.13), and by school type (Table B.14). Highlights of each of these cross-tabulations are presented below.

a. Age Levels

The largest percentage of students with a handicap in the 3-5 age group had a speech impediment (49 percent). In the 6-12 age group, the major handicapping conditions were speech impairments (33 percent) and learning disabilities (30 percent). Eighty-six percent of all students with a speech impairment as a single condition were in the 6-12 age group. In the 13-15 age group, the largest percentage of students were learning disabled (38 percent), followed by mental retardation (28 percent). In the 16-21 age group, the largest percent were mentally retarded (39 percent) followed by learning disabled (26 percent). (These percents were computed from the findings presented in Table B.11, Appendix B.)

b. Sex

Within the male student population, the largest percent of males were learning disabled (34 percent), followed by speech impaired (22 percent) and mental retardation (17 percent). The largest percent of female students had a speech impairment (27 percent), followed closely by those who were learning disabled (24 percent) and mentally retarded (23 percent). As previously noted (see Table 2.2), 64 percent of the students with IEPs were males. There was slight variation in this 64/36, male/female ratio within handicapping conditions, e.g., the mentally retarded (57 percent males), learning disabled (71 percent males), emotionally disturbed (79 percent males), and speech impaired (58 percent males). However, these estimated ratios are in the general range of 64 percent. (Percents were computed from findings presented in Table B.12, Appendix B.)

c. Race

Within each of the four race categories, the following differences are noted in the distribution of students with various types of handicaps (percents computed from findings presented in Table B.13, Appendix B):

1) The largest percent of whites were learning disabled (33 percent), followed closely by speech impaired (27 percent). The mentally

retarded and those with multiple conditions are a distant third and fourth (about 16 percent each).

2) The largest percent of black students were classified as mentally retarded (35 percent), followed by learning disabled (24 percent), and multiple conditions (18 percent).

3) With respect to Hispanic students, the largest percent were learning disabled (24 percent), followed by speech impaired and those with multiple conditions (about 20 percent each).

4) The largest percent of students in the "Other" category (American Indians, Alaskan Natives, Asians, and Pacific Islanders) were mentally retarded (36 percent) and learning disabled (23 percent).

d. School Type

There are several differences in the distributions of students in regular and special schools with regard to the nature of their handicapping conditions (see Table B.14, Appendix B):

1) Eighty percent of the students in special schools were either mentally retarded (40 percent) or have multiple conditions (40 percent), as compared to 19 and 16 percent of the students in regular schools.

2) Whereas 32 percent of the students in regular schools were learning disabled, only 1 percent had this single condition in special schools. A similar difference occurs with respect to the speech impaired (25 percent in regular schools versus 2 percent in special schools).

2. Severity of Handicaps

When classified by the severity of their handicap, 13 percent of the students had severe handicaps, 36 percent had moderate handicaps, and the remaining 51 percent had mild handicaps. It is emphasized that estimates of the severity of students' handicaps were provided by special education teachers who might have used their own frame of reference, a strategy that might have attenuated the reliability of these data. (Distributions of students are cross-classified by nature and severity of handicapping condition in Table B.8, Appendix B.)

The distributions of students served in regular and special schools are shown in Table B.15 (Appendix B), by severity of their handicapping conditions. A little over 50 percent of the handicapped students served in regular schools had mild handicapping conditions, as compared to 18 percent of the special school students; and, only 29 percent of the students in special schools had severe handicaps as compared to 12 percent of the students in regular schools. The distribution of handicapping conditions by level of severity within special schools is somewhat surprising; i.e., 18 percent had mild handicaps and 29 percent had severe handicaps. One would expect to find fewer students with mild conditions and a larger percent with severe conditions enrolled in special schools. A possible explanation for this finding is that teachers in special schools may have judged the severity of conditions in relation to other students in special schools.

II. CHARACTERISTICS OF SCHOOLS

The schools in which the Basic Survey students were served are described by their type (regular or special), grade-level organization (elementary, secondary, or elementary/secondary), community location, enrollment size, proportion of enrollees who were handicapped, and whether or not their handicapped students were served in other schools on a pullout basis. (See Appendix I for definitions of these variables and their sample sizes.) This school descriptive information was obtained directly from school principals and/or school district staff.

A. School Type and Grade-Level Organization

1. School Type

A little less than 2 percent of all the schools serving handicapped students were classified as being special schools; the remaining 98 percent were regular schools. (See Appendix B, Table B.16.) Four percent of the total population of handicapped students was served in special schools and 96 percent was served in regular schools. (See Appendix B, Table B.17.)

The distribution of students with IEPs in regular and special schools was cross-tabulated by each of the following three student-related reporting variables: race, age, and sex. These cross-tabulations are presented in Tables B.18 (race), B.19 (age), and B.20 (sex). Since 96 percent of all handicapped students were enrolled in regular schools, one might assume that the 96/4 distribution of students in regular/special schools would hold across the various levels of these three reporting variables. To address this assumption, the findings shown in Tables B.18-B.20 are presented in Table 2.4, using the percent of students in each level of the three reporting variables (race,

Table 2.4

DISTRIBUTION OF STUDENTS WITH IEPs, BY SCHOOL TYPE WITHIN RACE, AGE, AND SEX CLASSIFICATIONS

(In Percents)

Student Characteristics	Type of School	
	Regular	Special
Race		
White, Not Hispanic	97	3
Black, Not Hispanic	93	7
Hispanic	98	2
Other	95	5
Age Levels		
3-5	92	8
6-12	97	3
13-15[a]	96	5
16-21	89	11
Sex		
Male	96	4
Female	96	4

[a] Detail does not add to total because of rounding.

age, and sex) as a base to compute the percent of students with a given characteristic who were enrolled in regular and special schools.[8] The results in Table 2.4 indicate that, although some differences occur in race categories (more blacks and fewer Hispanics were enrolled in special schools) and age levels (more students aged 3-5 and 16-21 were enrolled in special schools), the 96/4 ratio generally holds across all levels of each of the three major characteristics.

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[8] For example, Table B.20 shows that about 63.7 percent of the students are males, and that 61.3 percent of all students are male and enrolled in regular schools. Dividing 61.3 by 63.7 indicates that about 96 percent of the males were enrolled in regular schools.

2. Grade-Level Organization

Eighty-three percent of the schools enrolling handicapped students were elementary schools, 14 percent were secondary schools, and 3 percent were elementary/secondary schools--about 42 percent of these elementary/secondary schools are special schools. (See Appendix B, Table B.16.)

Eighty-three percent of the students were enrolled in elementary schools, 12 percent were enrolled in secondary schools, and 4 percent were enrolled in elementary/secondary schools. The major reason that elementary/secondary schools, which constituted 3 percent of the schools that enrolled handicapped students, enrolled 4 percent of handicapped students is the relatively large percent of special schools (with their high enrollments of handicapped students) that were classified as elementary/secondary schools. (See Appendix B, Table B.17.)

B. Type-of-Community Location and Enrollment Size

1. Type-of-Community Location

Schools were distributed over community types as follows: rural (34 percent); small city (27 percent); urban (21 percent); and suburban (18 percent). (See Appendix B, row totals in Table B.21.) The distribution of the handicapped students across these school classifications was: rural (21 percent); small city (28 percent); urban (29 percent); and suburban (22 percent). (See Appendix B, row totals of Table B.22.) Although there were more schools in rural locations than in any of the other three locations, rural schools served the fewest students. As discussed in subsection 3 below, these differences are probably due to the larger student enrollments (handicapped and nonhandicapped combined) in each of the "nonrural" classifications.

2. Size

Ten percent of the schools were large; and the remaining 90 percent were divided between the medium (43 percent) and small (47 percent) classifications. (See Appendix B, column totals of Table B.21.) Most of the students with IEPs, however, were enrolled in medium-sized schools (53 percent), as compared to 29 percent in small schools and 18 percent in large schools. (See Appendix B, column totals of Table B.22.)

3. Type of Community by School Size

When schools are cross-classified by type of community and enrollment size, 24 percent of all schools were small and located in a rural community.

It was also noted that 51 percent of all small schools were located in rural communities as compared to 24, 14, and 12 percent in small city, urban, and suburban areas, respectively. Large- and medium-sized schools tend to be distributed pretty evenly over small city, urban, and suburban communities. (See Appendix B, Table B.21.)

Although 24 percent of the schools were small and rural, only 12 percent of the students with IEPs were enrolled in schools in this category. Other school categories in which more than 10 percent of the students were enrolled are: medium-sized and urban (17 percent); medium-sized and small city (16 percent); and medium-sized and suburban (14 percent). (See Appendix B, Table B.22.)

4. Type-of-Community Location of Special Schools

A little over one-half (54.3 percent; standard error of 7.3) of all special schools were located in urban areas; only 11 percent (10.8 percent; standard error of 4.2) were located in rural areas; and the remaining 35 percent were divided almost equally between small city (16.9 percent; standard error of 4.2) and suburban locations (18 percent; standard error of 6.0).

C. Proportion of Handicapped Enrollees

For descriptive purposes, each regular school was placed into one of three categories according to a ratio obtained by dividing the total student enrollment by the number of enrollees who were handicapped. Schools with less than 6 percent of their total enrollment reported as being handicapped were placed in the low category, those with 6-9 percent were placed in the medium category, and those with 10 percent or more were placed in the high category. Information for computing these ratios was obtained directly from school principals or school district staff. Special schools were excluded because, as expected, nearly 100 percent of their enrolled students were handicapped.

Thirty-six percent of the schools were classified as having a low proportion of handicapped enrollees (less than 6 percent), 33 percent were placed in the medium category (6-9 percent), and 32 percent were placed in the high category (10 percent or more). (See row totals of Table B.23, Appendix B.)

Schools in these three categories of "handicapped-to-total enrollment" proportions were also cross-classified by type-of-community location and by school size.

1. Type-of-Community Location

As shown in Table 2.5, rural communities contained both the largest percent of low proportion schools (less than 6 percent handicapped) and the largest percent of high proportion schools (10 percent or more handicapped); i.e., 14 percent of all schools were classified as low proportion/rural and 12 percent were classified as high proportion/rural. Each of the remaining 10 classifications had fewer than 10 percent of the schools. Note that the urban classification was the only classification that had a greater percentage of high proportion than low proportion schools. Also, each of the four types of communities had a substantial representation of all three "proportion" categories. (See Table B.24, Appendix B.)

Table 2.5

PERCENT OF SCHOOLS, BY PROPORTION OF HANDICAPPED ENROLLEES
WITHIN TYPE-OF-COMMUNITY LOCATIONS

Proportion of Enrollees Who Are Handicapped	Type of Community				
	Rural	Small City	Urban	Suburban	Total
Low	14	10	6	6	36
Medium	9	10	6	7	33[a]
High	12	7	8	5	32
Total	34[a]	27	20	18	100

[a] Detail does not add to total because of rounding.

2. Size

Table 2.6 shows the cross-classification of schools by the three size and three proportion levels. As shown in this table, the category with the largest percent of schools was the high proportion/small size category (a little more than 18 percent). Only two other categories contained more than 14 percent of the schools--medium proportion/medium size (just under 18 percent) and low proportion/small size (17 percent). It is interesting to note that a greater percent of the small schools had high proportions of handicapped enrollees, than did the percents of medium-sized and large schools. (See Table B.23, Appendix B.)

Table 2.6

PERCENT OF SCHOOLS, BY PROPORTION OF HANDICAPPED ENROLLEES WITHIN SIZE CATEGORIES

Proportion of Enrollees Who Are Handicapped	School Size			Total
	Small	Medium	Large	
Low	17	13	6	36
Medium	11	18	4	33
High	18	12	1	32[a]
Total	46	43	11	100[a]

[a] Detail does not add to total because of rounding.

D. Provision of Pullout Services

A little over 8 percent (8.4, with standard error of 2.3) of the schools sent their students to other schools for special education services, on a pullout basis. About 45 percent (44.6, with standard error of 12.7) of these sending schools typically kept a file copy of the IEPs for these students. As shown in Table 2.7, almost one-half of these "sending" schools are located in rural communities, and about one-fourth are in small cities. (See Appendix B, Table B.25.)

Table 2.7

SCHOOLS SENDING STUDENTS TO OTHER SCHOOLS FOR SPECIAL EDUCATION, BY SCHOOL LOCATION

Type-of-Community	Percent[a]
Rural	47
Small City	23
Urban	17
Suburban	13
Total	100

[a] Percents are based on an estimated 6,184 sending schools.

III. CHARACTERISTICS OF SCHOOL DISTRICTS

School districts serving handicapped students are described in this section in terms of their: (a) size, (b) per-pupil expenditure level, and whether or not their students were served (c) through intermediate/cooperative districts or (d) by contracting services with private schools or institutions. These data were obtained directly from school district staff.

A. Enrollment Size and Per-Pupil Expenditure Level

1. Enrollment Size

Seventy-seven percent of the school districts enrolling handicapped students were small (less than 3,000 students), 18 percent were medium-sized (3,000-9,999 students), and 5 percent were large (10,000 or more students). However, only about 23 percent of the students with IEPs were enrolled in small districts, as compared to 30 percent in the medium-sized districts and about 47 percent in the large districts. (See column totals in Tables B.26 and B.27, Appendix B.)

2. Per-Pupil Expenditure Level

Thirty-six percent of the school districts serving handicapped students had annual per-pupil expenditure levels of less than $1,250 (low); 44 percent had levels in the range of $1,250 to $1,750 (medium); and 20 percent had levels over $1,750 (high). Twenty-five percent of the students with IEPs were enrolled in districts with low expenditure levels, 44 percent were enrolled in districts with medium expenditure levels, and 31 percent were enrolled in districts with high expenditure levels.[9] (See row totals in Tables B.26 and B.27 in Appendix B.)

3. Enrollment Size by Per-Pupil Expenditure Level

When school districts serving handicapped students are cross-classified by the three enrollment size and three per-pupil expenditure levels, it was found that 62 percent of all school districts are in two of the resulting nine categories--medium expenditure/small size (33 percent) and low expenditure/small size (29 percent). However, only 18 percent of the students with IEPs were enrolled in these two categories. (See Tables B.26 and B.27, Appendix B.)

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[9] Per-pupil expenditure information was not available for 2 districts in the sample, thus the percents of schools and students do not total 100.

B. Special Schools

Only seven percent of the school districts administered special schools for handicapped students; about one-half of these districts were large districts. (See Table B.28, Appendix B.)

Forty-two percent of all students with IEPs were enrolled in the districts that administered special schools. This finding is not surprising since special schools were most often found in the very large districts. (See Table B.29, Appendix B.)

C. Cooperative Service Arrangements

Table 2.8 shows the distribution of school districts by the percent of their handicapped students who were served through intermediate districts or cooperative arrangements with other districts. Note that only 25 percent of the districts did not serve any of their students through such arrangements, and that 43 percent of the districts served all of their handicapped students through intermediate/cooperative districts. (See row totals in Table B.30, Appendix B.)

Table 2.8

PERCENT OF DISTRICTS, BY PROPORTION OF STUDENTS SERVED THROUGH COOPERATIVE/INTERMEDIATE DISTRICTS

Percent (P) of Students Served	Percent Districts	Cumulative Percents
$P = 0$	25	25
$0 < P \leq 10$	14	39
$10 < P \leq 25$	3	42
$25 < P \leq 50$	5	47
$50 < P \leq 100$	4	51
$P = 100$	43	94
Undetermined	6	100
Total	100	--

Eighty-one percent of all the districts with cooperative arrangements were small districts, 15 percent were medium sized, and 4 percent were large. (See Table B.31, Appendix B.) This distribution differs slightly from that discussed in subsection A.1 above, indicating that a slightly larger percent of the small districts established cooperative arrangements than medium and large districts; i.e., about 77 percent of all school districts were small, whereas 81 percent of the districts with cooperative arrangements were small. (Compare column totals in Tables B.26 and B.31, Appendix B.) Also, a larger percent of the small districts that had cooperative arrangements served 100 percent of their students through these arrangements (50 percent), when compared to medium (19 percent) and large (13 percent) districts. (These results were computed from the findings presented in Table B.30, Appendix B.)

When the districts that had service arrangements with cooperative/intermediate districts were classified by per-pupil expenditure level, 35 percent of these districts had a low expenditure level, 43 percent had a medium level, and 21 percent had a high level. (See row totals of Table B.31, Appendix B.) This distribution is approximately the same as that presented in subsection A.2, indicating that districts with cooperative arrangements had a similar representation with respect to expenditure levels as did the total population of districts. (Compare row totals in Tables B.26 and B.31, Appendix B.) It was noted, however, that a larger percentage of the school districts with a low per-pupil expenditure level served 100 percent of their students through cooperative/intermediate districts, as compared to the percentages of districts with medium and high expenditure levels (about 56 percent of the districts with a low expenditure level as compared to about 35 percent of the districts in each of the two higher levels). (See Table B.32, Appendix B.)

D. Contracted Services

Approximately 40 percent (39.7, standard error of 6.1) of all school districts contracted with private schools or institutions for the provision of educational services to handicapped students. Almost all of these districts (96.7 percent, with standard error of 1.6) contracted with private schools or institutions located within, as well as outside, the geographic boundaries of the school district. Two percent (standard error of 0.9) of the districts contracted only with schools or institutions located within the district; none of the districts reported only contracting for services outside the district.[10] About 55 percent of the districts that did contract services, contracted such services for less than 4 percent of their handicapped students; none of the districts contracted for the provision of services to more than 22 percent of their handicapped students.[11] (See Appendix B, Table B.33.)

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[10] This information was not available for 1.3 percent of the school districts.

Districts that contracted services were distributed as follows with respect to size and per-pupil expenditure level.

1. Size

Fifty-nine percent of the contracting districts were small, 32 percent were of medium size, and 9 percent were large. (See column totals in Table B.34, Appendix B.) As noted earlier in subsection A.1, 77 percent of all school districts were small, 18 percent were medium-sized, and 5 percent were large. (See column totals of Table B.26, Appendix B.) Differences between these two distributions indicate that a greater percent of the medium-sized and large districts contracted for services than did small districts.

2. Per-Pupil Expenditure

Twenty-eight percent of the "contracting" districts had a low expenditure level, 42 percent had a medium level, and 30 percent had a high level. (See row totals in Table B.34, Appendix B.) A comparison of these findings to the distribution of districts over the three per-pupil expenditure levels (36 percent were low, 44 percent were of medium size, and 20 percent were high) indicates a positive relationship between expenditure level and utilization of contracted services. (See row totals of Tables B.26 and B.34, Appendix B.)

IV. SUMMARY

The data presented in this chapter respond to the Basic Survey question VIII: What are the characteristics of the students who have IEPs and are enrolled in public schools, and of the schools and school districts in which they are enrolled?

A. Students

Approximately three million students, aged 3 to 21 and enrolled in LEA-administered public elementary and secondary schools, were estimated to have been receiving special services on 1 December 1978; four percent of these students were enrolled in special schools. Ninety-five percent of the "served" students had IEPs. Data were presented on the status of plans for preparing IEPs for the 5 percent being served without IEPs.

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[11] Information about the percent of students for whom services were contracted was not available for 5.5 percent of the districts that contracted services.

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School principals indicated that about 85 percent of the students receiving services were being at least partially funded by P.L. 94-142, 10 percent from a combination of funds other than P.L. 94-142, 2 percent from P.L. 89-313, and 2 percent undetermined. As would be expected, proportionately more students in special schools were being supported by P.L. 89-313. Sources of funding did not vary according to the ages of the students.

Teachers most familiar with the students' IEPs identified the grade level, age, race, and sex of the students. Of particular note in these data is the finding that males are overrepresented and females are underrepresented in special education programs (1.75 times more male students than female students had IEPs). This relationship holds across grade levels. The majority of these students were white (75 percent), followed by blacks (17 percent), Hispanics (4 percent), and other (3 percent).

The data on the prevalence of handicapping conditions indicated that, in the group of 84 percent of the students with single handicapping conditions, learning disabilities (41 percent) was the most prevalent, speech impairments (33 percent) second, and mental retardation (26 percent) third. These three conditions comprised 75 percent of the students with handicaps; emotional disturbance (8 percent) and other health impairment (7 percent) were fourth and fifth in order of prevalence. Four-fifths of the 16 percent of the students who had multiple handicaps had only two conditions, with the following combinations accounting for most of the double handicaps: learning disabled and speech impaired, learning disabled and emotionally disturbed, mentally retarded and speech impaired, and mentally retarded and learning disabled.

The prevalence of handicapping conditions was significantly different in regular and special schools. Multiple conditions and mental retardation were the most prevalent conditions in special schools (about 40 percent each), whereas learning disabilities and speech impairments were the most prevalent conditions in regular schools (32 and 25 percent, respectively).

The relationship between the nature of handicaps and several variables was examined, including age, sex, race, and school type. Significant differences were found and patterns noted. Of particular interest is the difference in the prevalence of handicapping condition in white and black students: the most prevalent condition for white students was learning disability (33 percent) and the second was speech impairment (27 percent), the same pattern as for Hispanic students. For black students the most prevalent condition was mental retardation (35 percent) and the second was learning disability (24 percent), the same pattern as for American Indians, Alaskan Natives, Asians, and Pacific Islanders.

Approximately 13 percent of the students had severe handicaps, 36 percent moderate handcaps, and 51 percent mild. Of particular interest is the finding that 12 percent of the students served in regular schools had severe handicaps, and 18 percent of the students served in special schools had mild handicaps. Only 29 percent of the students served in special schools had severe handicaps.

B. Schools

Only two percent of the schools that enrolled handicapped students were classified as special schools. Eighty-three percent of all enrolling schools were elementary schools, 14 percent were secondary schools, and the remainder were elementary/secondary schools. Thirty-four percent of the enrolling schools were located in rural communities; 27, 21, and 18 percent were located in small city, urban, and suburban communities, respectively. Handicapped students constituted a low proportion (less than 6 percent) of the student enrollment in just over one-third of the regular schools; medium (6-9 percent) and high (10 percent or more) proportions of handicapped students were each found in just under one-third of the regular schools. In eight percent of the schools, handicapped students were sent to other schools for special education services, on a pullout basis.

C. School Districts

About three-fourths of the school districts that served handicapped students were classified as small districts (total student enrollments of less than 3,000), slightly less than 20 percent were medium-sized (3,000-9,999 students), and five percent were large districts (enrollments of 10,000 or more students).

The 36 percent of the districts that had a low per-pupil expenditure level (less than $1,250 per year) served 25 percent of the handicapped student population; the 44 percent that had a medium expenditure level ($1,250-$1,750) served 44 percent of the handicapped students; and the 20 percent that had a high expenditure level (over $1,750) served 31 percent of the national population of handicapped students.

Seven percent of the school districts administered special schools for handicapped students. Half of these districts were large districts.

Data presented on cooperative service arrangements indicated that 25 percent of the districts did not serve any of their students through cooperative arrangements while 43 percent served all of their handicapped students through intermediate/cooperative districts. Eighty-one percent of the districts with cooperative arrangements were small districts.

Forty percent of all school districts contracted with private schools or institutions for educational services. A greater percentage of medium-sized and large districts contracted for services than did small districts. Districts with a high per-pupil expenditure level contracted for the provision of special services with a greater frequency than did districts with medium and low expenditure levels, and districts with a medium expenditure level contracted for the provision of such services with greater frequency than did districts with a low expenditure level.

Chapter 3

What Do IEPs Look Like?

Although P.L. 94-142 provides guidelines as to the contents of IEPs, matters related to the formats and basic characteristics of these documents are left to the discretion of state and local education agencies. This chapter presents survey findings about several characteristics of IEPs in answer to the study question: What do IEPs look like? IEPs are described in terms of their length or the number of pages they contain, whether or not they are legible and easy to read, their formats, and whether or not they consist of single or multiple documents. A brief summary is presented at the end of the chapter.

Detailed descriptive statistics and associated standard errors for the population estimates reported in this chapter are presented in Appendix C.

I. NUMBER OF PAGES

The length of an IEP, in addition to being a basic descriptor, offers some insight into the effort expended in its development (provided one accepts the somewhat tenuous assumption that, in general, greater effort is required to produce a lengthy document). In determining the number of pages in each IEP, the back of the page was counted as a separate page when it was used, and pages from a referenced standard curriculum or referenced instructional material were not included in the page count.

A. Basic Survey Population

For the Basic Survey population, the average (mean) number of pages in an IEP is nearly 5, with a range of 1 to 47 and a standard deviation of 4. Nearly 24 percent of the IEPs consist of 2 pages, followed by 16 percent with 3 pages, 14 percent with 4 pages, 13 percent with 7 to 10 pages, 12 percent with 5 pages, 7 percent with more than 10 pages, and 6 percent with one page. (See Appendix C, Table C.1.) About 50 percent of the IEPs were less than approximately 3.5 pages in length. (The median probably is a better indicator of the central tendency of the number of pages in IEPs because of the small percent of IEPs that had a large number of pages.)

For Federal compliance purposes, the IEP document is viewed as a management tool "that is designed to insure that each handicapped student is provided special education and related services appropriate to his/her special learning needs," as opposed to being a more detailed instructional plan.[1] A study of examples of IEP formats that were presented in a recent publication suggests that, on the average, a document of two to three pages should be adequate for meeting the letter of the law for the IEP provision of P.L. 94-142.[2] Additional pages would be required, however, to include any state or locally specified information that extends beyond Federal requirements.

B. Variation by Subpopulations

The number of pages in IEPs was analyzed for student subpopulations defined by reporting groups within five reporting variables: (1) student age levels; (2) severity of student handicap; (3) type of school (regular or special) in which the student was enrolled; (4) size of district enrollment; and (5) district per-pupil expenditure level.

1. Student Age Levels

Comparisons of the average lengths of IEPs for four student age levels (3-5, 6-12, 13-15, and 16-21) led to the conclusion that there are no statistically significant differences between these groups. (See Appendix C, Table C.1.)

2. Severity of Student Handicap

When students are classified by the severity of their handicaps, there is no significant difference between these groups in the page-length of their IEPs. The mean number of pages in IEPs for students with mild, moderate, and severe handicaps is 4.8, 4.8, and 5.2, respectively. Though not statistically significant, this observed finding that the IEPs of the more severely handicapped students are an average of almost one-half page longer than those of students who are less severely handicapped is in the expected direction. (See Appendix C, Table C.2.)

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[1] "Informal Letter to State Directors of Special Education, State Part B Coordinators, and State P.L. 89-313 Coordinators: Policy Paper on Individualized Education Programs (IEPs)." DAS Information Bulletin, Number 64. Washington, D.C.: Bureau of Education for the Handicapped (USOE, HEW), May 23, 1980.

[2] Patricia H. Gillespie, "A Planned Change Approach to the Implementation of the IEP Provision of P.L. 94-142," in Exploring Issues in the Implementation of P.L. 94-142: Developing Criteria for the Evaluation of Individualized Education Program Provisions. Philadelphia, Pennsylvania: Research for Better Schools, Inc., May 1979.

3. Regular and Special Schools

The IEPs developed for students in special schools are significantly longer (by a factor of 1.5) than those developed for students in regular schools (a mean of 7.0 pages compared to 4.7). IEPs for approximately 48 percent of the students in special schools are longer than 5 pages, as compared to 27 percent for students served in regular schools. (See Appendix C, Table C.3.)

4. Levels of School District Size

IEPs for students in small school districts have significantly fewer pages than the IEPs of students in medium and large districts (a mean of 4.3 pages, as compared to 4.9 and 5.1 for medium and large districts, respectively). Observed differences in the lengths of IEPs for students in medium and large districts are not significant. (See Appendix C, Table C.4.)

5. Levels of School District Per-Pupil Expenditures

There are no differences in the lengths of IEPs developed for students in districts with low, medium, and high per-pupil expenditure levels. (See Appendix C, Table C.5.)

II. LEGIBILITY AND EASE OF READING

One of the primary purposes and functions of the IEP document is to serve as a "communication vehicle between all participating parties to insure that they know what the child's problems are, what will be provided, and what the anticipated outcomes may be."[3] It is important, therefore, that the document be easy to read. The implementation problems associated with difficult-to-read IEPs could be compounded by the fact that IEPs for the fall term often are prepared during the previous spring by teachers in a different school. When this situation does occur, it might not be convenient (or even possible) for "fall term" teachers to contact the original preparers of the document for clarification of illegible points.

For this study, each document was classified into one of three categories: (a) typed; (b) handwritten and easy to read; and (c) handwritten and difficult to read. An IEP in which at least one-fourth of the entered information was difficult to read was placed in the third category, even if part of it was typed. That is, at least three-fourths of the document had to be easy to read to be classified in either the first or second category.

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[3] DAS Information Bulletin, Number 64, op. cit.

The legibility classification did not pertain to the quality of the photocopying or to the content and style of the writing. Rather it was a judgement of the ease with which the document could be read. For IEPs included in the first two categories ("a" and "b" above), a final delineation was dependent upon the portion of the IEP that was typed. If 50 percent or more of the entered information was typed, it was placed in the "typed" category; otherwise, it was considered to be handwritten. Examples illustrating the distinction between "easy to read" and "difficult to read" are provided in Appendix P (pages p.2-p.7) of Volume II.

Approximately 17 percent of the IEPs are typed and legible, 81 percent are handwritten but easy to read, and only 1 percent are difficult to read. That is, virtually all (99 percent) of the IEPs are reasonably easy to read, whether typed or handwritten.[4]

A comparison was made of the average page lengths of the IEPs in each of the three "legibility" categories (typed and legible, handwritten but easy to read, and handwritten and difficult to read). This comparison indicated no significant relationship between the length and legibility of IEPs. (See Appendix C, Table C.6.)

III. FORMATS

The general format of the IEPs is typically designed at the state or school district levels. That is, teachers are typically provided with an IEP form that has been developed at the district level, and the district in turn may have developed the form according to SEA guidelines. In this section, three basic characteristics of these formats are described: (a) the types of information headings the IEPs contain; (b) whether or not the amount of space provided by the IEP format limits or restricts the number of annual goals or short-term objectives to be included; and (c) whether or not the format permits parental approval of the entire IEP. These properties are important because they dictate to a great extent the kinds of information to be included in each student's IEP.

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[4] The standard errors (in percentage points) associated with these estimates are as follows: (a) typed and legible--17.2 percent and standard error of 1.8; (b) handwritten but easy to read--81.4 percent and standard error of 1.9; and (c) difficult to read--1.4 percent and standard error of 0.5.

A. Types of Information Headings

An IEP was coded as having a heading for a particular type of information if and only if it contained a heading that clearly was intended to collect that particular type of information. The extent to which information actually was entered in the spaces provided for the headings is discussed in Chapter 4.

1. Basic Survey Population

Tables 3.1 and 3.2 summarize survey findings regarding the types of information headings specified in IEP formats; Table 3.1 focuses on headings for mandated information areas, whereas Table 3.2 covers the nonmandated information areas.

Table 3.1

MANDATED INFORMATION AREAS FOR WHICH HEADINGS ARE SPECIFIED IN IEPs

Information Headings[a]	Percent IEPs With Heading
Statement of annual goals.	94
Short-term objectives.	92
Statement of the present level of educational performance.	90
Projected date for initiation of specific services.	89
Statement of specific educational services to be provided.	81
Anticipated duration of specific services.	80
Statement of the extent to which child will be able to participate in regular educational programs.	77
Proposed evaluation criteria.	53
Proposed evaluation procedures.	40
Proposed schedules for determining whether instructional objectives are being met.	28

[a] A heading for "assurances of at least an annual evaluation" was not expected to be found in IEPs and therefore is not included.

Table 3.2

NONMANDATED INFORMATION AREAS FOR WHICH HEADINGS ARE SPECIFIED IN IEPs

Information Headings	Percent IEPs With Heading
A. BASIC STUDENT CHARACTERISTICS	
Student's age or birthdate.	82
Student's grade level.	59
Nature of student's handicap.	27
Student's sex.	13
Student's race.	7
B. ASSESSMENT-RELATED	
Assessment data to support present level of performance.	36
Date of the assessment of present level of performance.	23
Student's strengths.	23
Physical education needs.	12
C. PLACEMENT-RELATED	
Placement recommendation.	66
Rationale for placement or services.	22
D. INSTRUCTION-RELATED	
Student's primary language.	6
Student's school attendance record.	3
Student's special interests.	2
E. PROCESS OF IEP DEVELOPMENT, APPROVAL, AND REVIEW	
Participants in the IEP process.	87
Date of preparation of IEP.	84
Titles of individuals who approved the IEP.	76
Parental approval.	74
Signature of individuals who approved the IEP.	61
Proposed IEP review date.	49
Results of parental notification.	10
Actual IEP review date.	8
Results of IEP review.	8
Participants in IEP review.	7
F. PROPOSED PROGRAM OF SPECIAL SERVICES	
Personnel responsible for services.	67
Recommended instructional materials, resources, strategies, or techniques.	60
Date short-term objectives met.	23
Priority listing of annual goals.	17
G. OTHER	
Other.[a]	38

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[a] IEPs with at least one "other" heading. Includes such headings as: date of referral, provisions for mainstreaming, or last grade obtained.

a. Mandated Information Areas

As reflected in Table 3.1, headings for only four mandated information areas were included in at least 89 percent of the IEPs; i.e., statement of annual goals (94 percent), short-term objectives (92 percent), statement of the present level of educational performance (90 percent), and projected date for initiation of specific services (89 percent). Since it is reasonable to assume that the presence of an appropriate heading in an IEP would better insure that specific information is entered, the percent of IEPs with related headings is lower than expected for all but four of the eleven mandated information areas. One of the four exceptions, "assurances of at least an annual evaluation of short-term objectives," was not expected to have a heading because such assurances are usually reflected in evaluation schedules. The other three exceptions--evaluation criteria (53 percent), procedures (40 percent), and schedules (28 percent) for short-term objectives--are typically found in objectives that are stated in behavioral or measurable terms. As a result, one could not expect to find these three headings on IEPs prepared in schools or school districts that emphasize the specification of objectives in measurable terms. (See Appendix C, Table C.7.)

b. Nonmandated Information Areas

For reader convenience, findings about headings for nonmandated information have been placed into seven categories for presentation in Table 3.2: (a) basic student characteristics; (b) assessment-related data; (c) placement-related data; (d) instrument-related data; (e) process of developing, approving, and reviewing the IEP; (f) proposed program of special services; and (g) other. The "other" category includes headings that occurred too infrequently (i.e., in less than 2 percent of the IEPs) to be identified and reported separately.

As reflected in Table 3.2, IEPs contained headings for a variety of nonmandated information areas, most of which enhance the utility of the IEP as a communication vehicle between all participating parties and as a compliance/monitoring document; e.g., student's age or birthdate, placement recommendation, student's strengths, and participants in the IEP process. However, the importance attached to each heading probably varies widely throughout the nation. For example, whether or not the heading, "student's primary language," is included would depend largely on whether or not the school or school district enrolled significant numbers of students who speak more than one language. (See Appendix C, Table C.8.)

2. Variation by Subpopulations

When the IEPs of students in regular and special schools were compared, a significantly greater percentage of IEPs prepared for special school students had a heading associated with one mandated area; i.e., statement of specific educational services to be provided (91 percent versus 80 percent). Suggestive differences in the same direction were found in two areas: (a) anticipated duration of specific services (88 percent versus 80 percent); and (b) statement of present level of educational performance (94 percent versus 90 percent). Observed differences in the remaining mandated areas were nonsignificant. (See Appendix C, Table C.9.)

With the exception of four areas, headings for the various nonmandated information areas occurred at approximately the same frequency on the IEPs of students enrolled in regular and special schools. The first of these exceptions is that 94 percent of the IEPs for special school students had a heading for the student's age or birthdate, as compared to 82 percent of the regular school IEPs. The other three areas in which differences were noted relate to information about the process of developing, approving, and reviewing IEPs. Larger percentages of the IEPs of special school students had headings in all three of these areas (see Appendix C, Table C.10):

a) Date of preparation of the IEP (93 percent versus 83 percent).
b) Titles of individuals who approved the IEP (85 percent versus 75 percent).
c) Proposed IEP review date (69 percent versus 48 percent).

B. Restrictive Formats

If the IEP format provided only a small amount of space for goals and objectives, or if there were no headings for goals and/or objectives, the format was coded as limiting or restrictive. (For this analysis, the number of goals entered in the completed IEP was not considered as limiting the number of objectives, and vice versa.) Also, a determination as to whether or not an IEP format limited the number of annual goals or objectives was based on the question: Would the use of additional page(s) of goals and/or objectives require the re-completion of a major segment of information in order to avoid leaving essential portions of the page blank? In other words, if the IEP was designed so that a person who wished to append additional pages of goals or objectives to the IEP would have to repeat some information (such as student's name, age, grade, etc.) on each page, the format was considered limiting: it would take more time than necessary to add pages of goals and objectives, and the additional effort required might affect the decision of whether to be exhaustive in entering goals and/or objectives.

1. Basic Survey Population

Nearly two-thirds (65 percent) of the IEPs limited the number of annual goals through format design, and 39 percent limited the number of short-term objectives. (See Appendix C, Table C.11.)

Evidence of the effects of the restrictive nature of IEP formats was obtained by an analysis of the numbers of goals and objectives contained in the two sets of IEPs coded as being restrictive or nonrestrictive. When IEPs were classified by whether or not their formats restrict the number of goal statements, there was a mean difference of 1.1 goals between the two groups.[5] This difference, though not statistically significant, suggests that IEPs with restrictive formats contain fewer goals. However, when a similar analysis was conducted for objectives, a significantly larger average number of objectives was found in IEPs with nonrestrictive formats for objectives; i.e., there was a mean difference of 8.9 objectives between the two groups.[6] These results are not to be interpreted as implying that IEPs with "more" goals or objectives are necessarily "better" IEPs; the number of goals/objectives should be dictated solely by the student's needs. However, a restrictive format, while it may keep an IEP from being unnecessarily long, also might prevent the entry of important information.

2. Variation by Subpopulations

Subpopulations defined by two reporting variables, student age levels and type of school (regular versus special), were analyzed for variations in the percent of IEPs with restrictive formats.

a. Student Age Levels

With respect to formats that limit the number of annual goals, about three-fourths of the IEPs for children in the 3-5 age group had restrictive formats, compared with approximately two-thirds of the IEPs for the other three age groups (6-12, 13-15, and 16-21). These differences are not statistically significant, but they are large enough to "suggest" that a larger percentage of the IEPs prepared for the 3-5 age group have restrictive formats for goal statements than do IEPs prepared for the older age groups. Differences between age levels in the number of IEPs with formats that limit the number of short-term objectives are not significant. (See Appendix C, Table C.11.)

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[5] There was an average of 5.2 goals in IEPs with limited (restrictive) formats, and 6.3 in the others; the estimated standard errors for these means are .3 and .6, respectively.

[6] IEPs with nonlimiting formats had an average of 29 short-term objectives (standard error of 2.3), as opposed to an average of 20.1 objectives (standard error of 3.1) in IEPs with limiting formats.

b. Regular and Special Schools

When examined by school type, 39 percent of the regular school IEPs have formats restricting the number of short-term objectives, as opposed to 28 percent for special schools. These results, though not statistically significant, suggest that IEP formats for regular school students are more limiting regarding short-term objectives than are special school formats.

Differences between the school types relative to formats that restrict annual goals are not significant. (See Appendix C, Table C.12.)

C. Format as Related to Parental Approval

1. Basic Survey Population

While the format of about half (48 percent) of the IEPs was such that the parental approval would be for the entire IEP, the format of a substantial number was such that approval appeared to be intended for only a portion of the IEP. (See Appendix C, Table C.13.) It should be noted that the issue here is the IEP format as related to the space for a parental approval signature. Whether or not the parent actually signed the IEP, and the types of headings included in IEPs are discussed elsewhere. A heading specifically requesting "parental approval" was not required for the data discussed in this subsection. A heading (e.g., committee approval) that requested IEP approval without noting personnel types was accepted here as an appropriate space or heading for parental approval.

In 12 percent of the IEPs, the space for parental approval was located so as to indicate that approval would be for the annual goals but not for the short-term objectives. The short-term objectives in these IEPs apparently were written later after the student was placed in special education, and the parent did not necessarily approve these objectives, at least not by signing the IEP itself.

In an additional five percent of the IEPs, the parental approval would have been for part but not all of the short-term objectives. Apparently, for these IEPs part of the short-term objectives were included in the original IEP, and additional objectives were added later. The parent would not have approved these added objectives, at least not by signing the IEP.

In 11 percent of the IEPs, the parental approval would have been for services to be provided (usually a statement of placement in a particular setting) but not for the annual goals or the short-term objectives, which apparently were prepared after placement.

In two percent of the IEPs, it was not clear from the format what would be approved by a parental signature. For example, the space for approval might be on a separate form attached to a multiple page IEP that listed placement on one page, goals on another page, and objectives on still another page. (See row totals of Table C.13, Appendix C.)

The remaining 22 percent of the IEPs did not have a heading or space for parental approval or disapproval. (Note that P.L. 94-142 does not require that IEPs contain information about parental approval or disapproval.)

2. Variation by Subpopulation

Subpopulations were defined by two reporting variables, student age levels and type of school, were analyzed for variations in the percent of IEPs with various format/parental approval relationships. No significant differences were noted.

IV. MULTIPLE DOCUMENTS

In studying the IEPs collected in the national survey, it was noted that some of the IEPs consisted of more than one document covering the same time frame. Two types of additional separate documents were identified: (a) separate IEPs prepared by different teachers or service sources, e.g., the mathematics teacher prepared an IEP related to mathematics and the English teacher prepared one related to English (such documents were not considered to be separate if only pages of goals and/or objectives were prepared separately); and (b) separate placement and implementation documents, one prepared for the sole purpose of recording assessment and placement data (but with no plans for a program), and the second prepared solely to document program planning. The combined placement and implementation documents constituted an IEP.

Multiple IEP documents were prepared for only three percent of the students. The types of multiple documents prepared for these students were divided about evenly between those consisting of separate documents from different teachers or service sources and those from separate placement and implementation documents.

Since virtually all of the IEPs consisted of a single document, no further analyses were conducted.

V. SUMMARY

This chapter addressed the question: What do IEPs look like? In answer to this question, IEPs were described in terms of such basic characteristics as their lengths, legibility, formats, and whether or not they were single or multiple documents. Variations in these IEP properties among selected subpopulations also were investigated.

IEPs prepared for students enrolled in LEA-administered public schools had a mean length of almost five pages. However, about one-half of all IEPs were less than 3.5 pages in length. IEPs prepared for students enrolled in special schools were significantly longer than those of students enrolled in regular schools (a mean of 7.0 pages as compared to 4.7 pages); IEPs for students in small school districts consisted of fewer pages (mean of 4.3) than those prepared in medium and large districts (means of 4.9 and 5.1 pages, respectively). Practically all IEPs (99 percent) were reasonably easy to read, and 81 percent were handwritten.

IEP formats contained headings for a wide variety of information areas, many of which are not mandated by P.L. 94-142. However, under the assumption that the inclusion of an appropriate heading will improve the possibility that desired information will in fact be included, the percent of IEPs that contained headings for the mandated information areas was lower than expected; i.e., headings for only four of the mandated areas were found in at least 88 percent of the IEPs. For the most part, the headings related to nonmandated information were important to understanding the students' special needs and program; e.g., student age or birthdate, placement recommendations, and student strengths. A comparison of the IEPs prepared for students in regular and special schools indicated that headings for one of the mandated and three of the nonmandated information areas were contained more often in special school IEPs than in regular school IEPs.

The formats of about two-thirds of the IEPs were restrictive or limiting with regard to the number of annual goals that could be listed, and almost 40 percent of the IEPs had a similar restriction for short-term objectives. Though not statistically significant, the findings for subpopulations "suggested" that: (a) more of the IEPs of children in the 3-5 age group had restrictive formats for goal statements than did the IEPs of the other age groups; and (b) a larger percent of the IEPs for students in regular schools had formats that limited the number of objectives than did the IEPs of students in special schools.

The formats of 48 percent of the IEPs were such that parental approval appeared to be intended for the entire IEP, 22 percent of the IEPs had no place for parental approval or disapproval, and the remaining 28 percent requested approval that appeared to be intended for only a portion of the IEP; i.e., annual goals but not objectives (12 percent), or part but not all of the objectives (5 percent), or services to be provided but not goals or objectives (11 percent).

Virtually all IEPs (97 percent) consisted of a single document. The remaining three percent of the IEPs consisted of multiple documents that either were prepared by different teachers or service sources, or prepared as separate placement and implementation plans.

Chapter 4

What Kinds of Information Do IEPs Contain and How Is This Information Presented?

This chapter presents a discussion of the kinds of information contained in IEPs and the manner in which this information was presented. For purposes of this discussion, the contents of IEPs have been separated into two broad categories: (a) the eleven information areas mandated by Section 602 of P.L. 94-142, and (b) information areas that are not mandated by P.L. 94-142. The kinds of information found in IEPs and the manner in which it was presented are analyzed for both the total population and for subpopulations defined by selected student, school, and school district characteristics.

Detailed descriptive statistics and associated standard errors for the population estimates reported in this chapter are referenced herein and are presented in Appendix D.

I. THE EXTENT TO WHICH MANDATED INFORMATION WAS CONTAINED IN IEPs, AND HOW THIS INFORMATION WAS PRESENTED

One of the criteria for both describing and evaluating IEPs must be the extent to which the documents contain the information mandated by P.L. 94-142. This information must be included in an IEP to comply with regulations regarding the provision of an education program that meets the needs of the individual handicapped student. This section first provides data on the extent to which mandated information was presented in IEPs and then provides data on how this mandated information and other closely related information were presented.

A. Mandated Information in IEPs: Basic Survey Population

1. Extent to Which Mandated Information Was Provided

As is portrayed in Figure 4.1, a very high percentage of IEPs contained a majority of the information mandated by the Act. (See Table D.1 for exact numbers and standard errors). In fact, 6 of the 11 types of required information were included in more than 90 percent of the IEPs. However, it should be pointed out that these data represent a generous interpretation

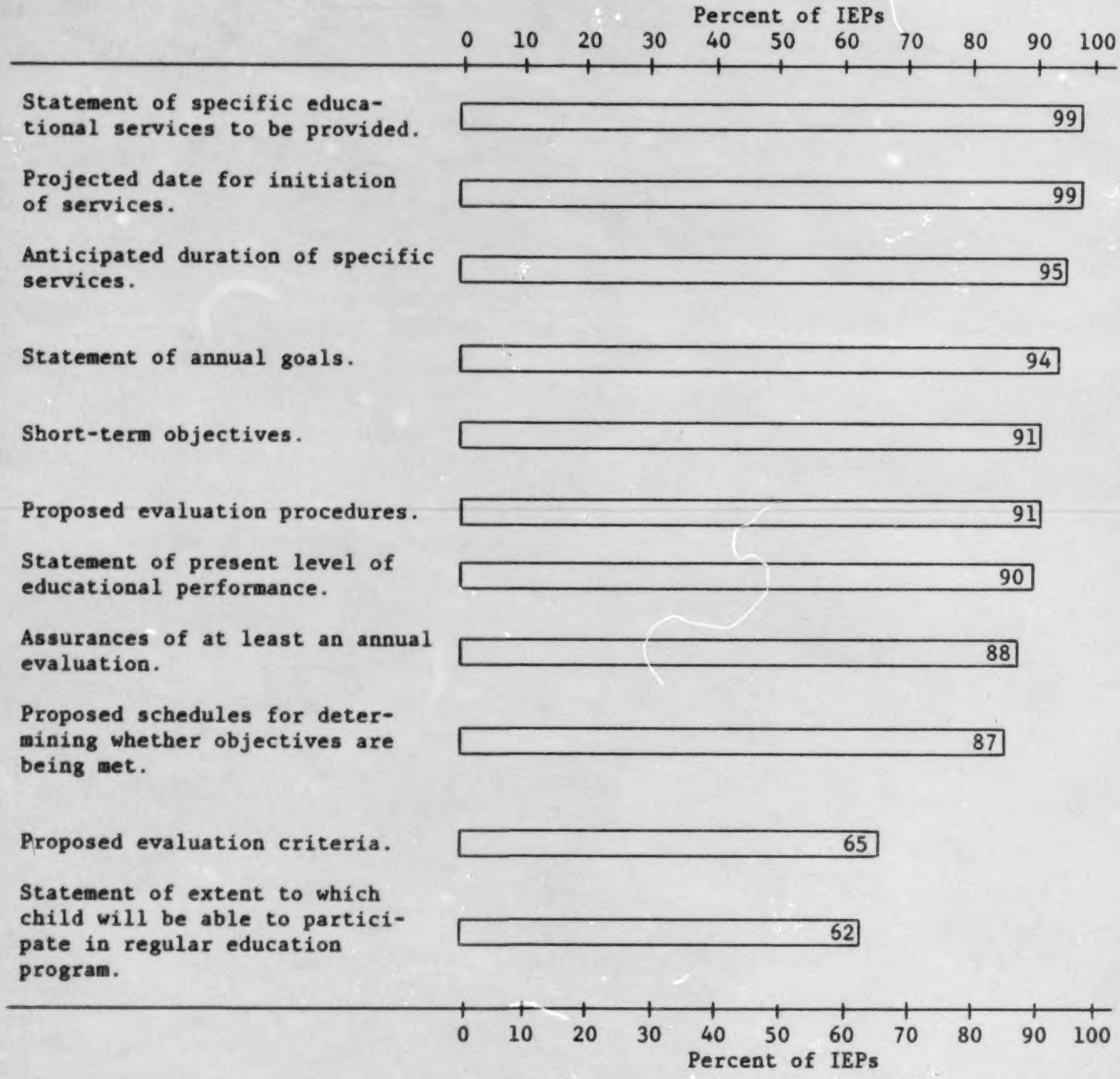


Figure 4.1. Percent of IEPs with Information Mandated by P.L. 94-142.

of what constitutes inclusion of the items of information. (See Appendix D, pages D.1 and D.2, for the coding criteria by which the data were derived.)

Only two types of mandated information were included so infrequently as to suggest significant problem areas: (a) information as to the extent of participation in regular education programs, and (b) proposed evaluation criteria.

Only 62 percent of the IEPs contained a statement of the extent to which the handicapped student will be able to participate in the regular educational program. This percentage is significantly lower than for most of the other mandated information items. It should be noted, however, that the term "regular education program" is not a particularly meaningful statement in special education schools. Also, in regular schools with only one special education program with a fixed service-provision time, it may not have been considered necessary (from a practical point of view) to make a statement concerning participation in the regular program.

Regarding the second apparent problem area, only 65 percent of all IEPs contained a statement of appropriate evaluation criteria. Given the fact that the IEPs demonstrate an intent to evaluate (88 percent contain some assurance of at least an annual evaluation), the difficulty apparently is related to the lack of headings in IEP formats for evaluation criteria or, more likely, to a failure to include specified standards as part of the short-term objectives statements. Although only 53 percent of the IEPs had a specific heading for this information area (see Table 3.1, Chapter 3), information was entered under these headings in 79 percent of the IEPs that had such a heading.

Figure 4.2 presents a cumulative distribution of the percentage of IEPs that contained either all or just some of the mandated information items. A little over one-third (36 percent) of all IEPs contained all the mandated information, 71 percent included information in at least 10 of the 11 mandated areas, about four-fifths (85 percent) included information in at least 9 of the 11 areas, and 90 percent contained information in 7 or more of the 11 areas. (See Table D.2.)

These findings are somewhat disappointing, especially the finding that about two-thirds of the IEPs did not meet all 11 mandated requirements (only 36 percent contained all necessary information). Since a high percentage of IEPs contained a variety of nonmandated information (see Section II below), it does not seem appropriate to conclude that too many information areas are mandated.

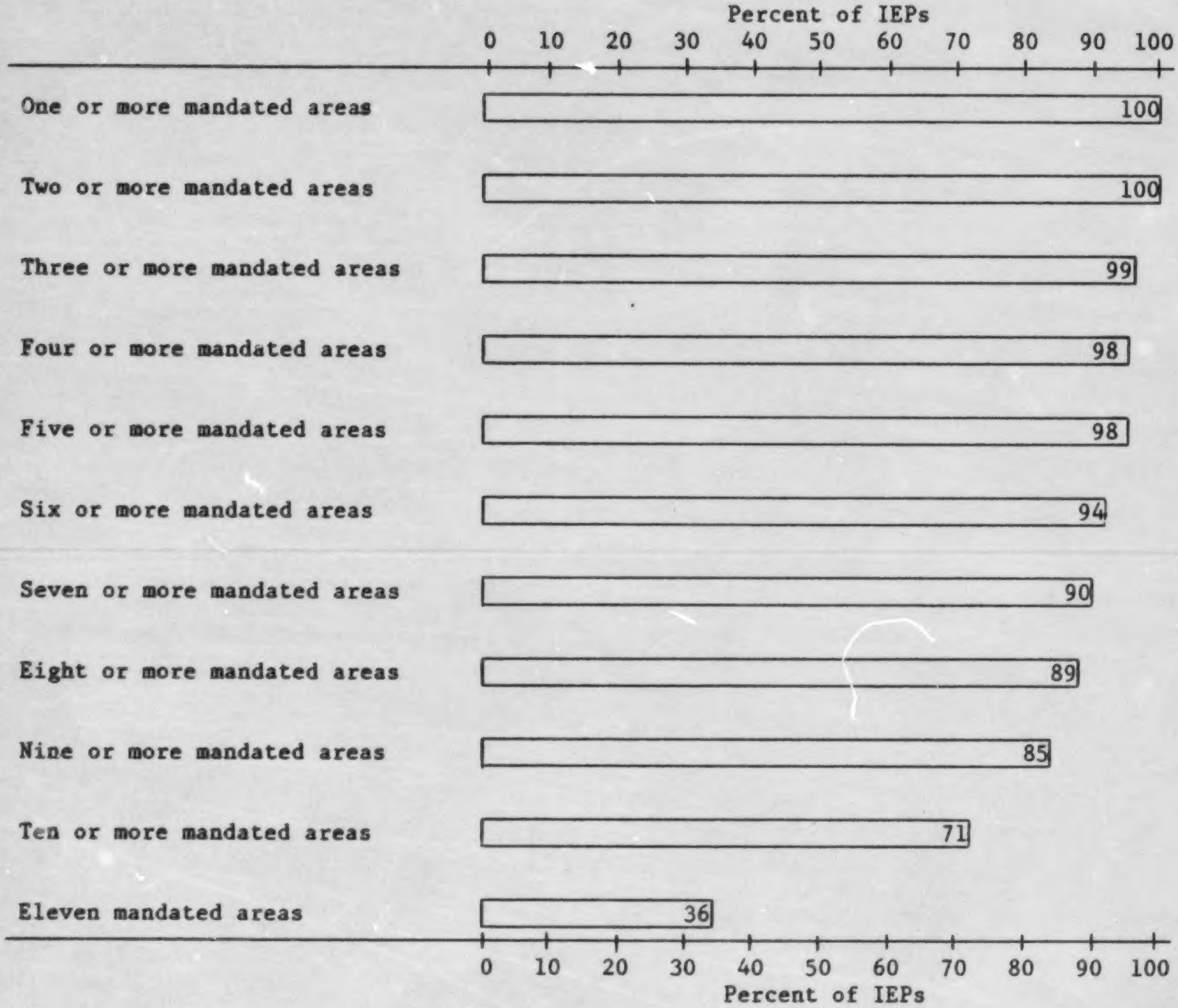


Figure 4.2. Cumulative Percentages of IEPs by Number of Mandated Information Areas for Which Information is Contained in IEP.

2. How Mandated and Related Information Were Presented

a. Statement of Present Level of Educational Performance

While, as was shown in Figure 4.1, 90 percent of the Basic Survey IEPs contained information regarding the handicapped student's present level of educational performance, there was a wide range of levels of completeness of this type of data. One IEP might state simply that "the student is behind in reading;" another might provide complete summary data regarding performance in a wide range of academic and functional areas plus data (e.g., test data) to support the level-of-performance information.

In attempting to describe the differences in present-level-of-performance information in IEPs, the following four questions were addressed:

1) What proportion of IEPs contained supporting data (e.g., test results) to substantiate the present-level-of-performance information?
2) What proportion of IEPs contained present-level-of-performance information for three or more academic or functional areas (e.g., reading or oral or written English, mathematics, social adaptation, speech)?
3) What proportion of IEPs contained present-level-of-performance information for academic or functional areas for which special education was found not to be needed?
4) What proportion of IEPs contained the date(s) of the assessment of present level of performance?

The rationale for these questions is as follows:

1) Although P.L. 94-142 does not require that IEPs contain supporting data, such information can be quite useful not only as an aid to initial program development but also as one basis for program revision. In the final analysis, such data provide the rationale for whether or not special education and related services are needed. Changes or lack of changes in such data should be the major determinant of future plans for the student, and easy reference to such data would be helpful to the teachers and others in their review of the educational plan. For the IEP to state, for example, that the student is "behind in reading" does not provide sufficient data for program planning. It leaves unanswered such critical questions as: How far behind in reading? Based on what evidence?

2) Once it is suspected that a student has a handicapping condition that contributes to a need for special education or related services, it would appear practical to evaluate the student's present level of performance in a number of academic and functional areas in order to provide a basis for development of a special education program. The alternative to this apparently would be an assumption on the part of the school personnel that they already know the student's level of performance in most areas. If they already have such information, such questions arise as: What is the basis for the information? How current is the information? Why not include such information in the IEP?

Based on the above, it does not appear unreasonable that an IEP include present-level-of-functioning information for a minimum of 3 of the 17 academic and functional areas outlined in the IEP Evaluation Checklist (see Item 6 in the IEP Evaluation Checklist, Volume II, Appendix C). While the number "three" is somewhat arbitrary, it would appear to be a reasonable minimum based on the range of ages of students covered by the Act and by the wide range of areas covered by the IEP Checklist. Thus, data regarding the proportion of IEPs that contained present-level-of-functioning information for three or more areas is one indicator of the completeness of the evaluation process as summarized in IEPs.

3) If a handicapped student is fully evaluated to determine his/her present level of performance (as opposed to evaluating only in those areas where a need already is known to exist), it appears likely that, in most cases, the evaluation will indicate that, in certain academic or functional areas, special education is not needed. This is particularly true, of course, in those cases where a need is indicated in only one or two academic or functional areas. Also, knowledge of the special-education-not-needed (strength) areas are important in planning a successful educational program for the handicapped student. Thus, inclusion of evaluation data for areas where no special education is found to be needed is one indicator of completeness of the IEP.

4) Listing of the date(s) that the assessment of present level of performance took place provides useful data for decision-making

purposes. The assessment data may or may not be current and, therefore, valid. A new evaluation in all or certain areas may be needed.

As portrayed in Figure 4.3 (and as was discussed in the previous subsection), 90 percent of the IEPs contained at least some present-level-of-performance information. However, it should be emphasized that in many of these IEPs only a bare minimum of such information was presented, often in a very general and vague manner. On the other hand, 51 percent of the IEPs not only contained at least some present-level-of-performance information, but also contained at least some supporting data. Fifty-three percent contained present-level-of-functioning data for at least three academic or functional areas, while 56 percent listed information for at least one area where special education was found not to be required. Eleven percent of the IEPs not only contained present level of performance information for at least three academic or functional areas, but also contained supporting data for 90-100 percent of these areas. Only a small proportion of IEPs (20 percent) contained the date(s) that the assessment of present level of performance took place. (See Table D.3 for standard errors.)

Ninety-six percent of the IEPs that had a heading requesting present-level-of-performance information actually contained the information. On the other hand, only 37 percent of the IEPs that did not have such a heading actually provided the data. From this it appears clear that there is a direct relationship between inclusion of a heading requesting the data and the provision of the data in the IEP. Similarly, with supporting data, 83 percent of the IEPs that had a heading requesting supporting data contained the supporting data while only 32 percent of the IEPs without such a heading contained the supporting data. (See Appendix D, pages D.3-D.5, for calculations.) The case of the date of the assessment of present level of performance is even more extreme in that such data rarely was contained unless requested by a heading in the IEP.

b. Annual Goals

The following discussion of how annual goals were presented in IEPs includes information regarding (1) the average number of and range of annual goals, (2) the extent to which goals were written in measureable terms, and (3) the extent to which goals were presented in order of priority.

The mean number of annual goals per IEP (for the 94 percent of IEPs that contained annual goals) was 5.6 with a standard deviation of about 6. The

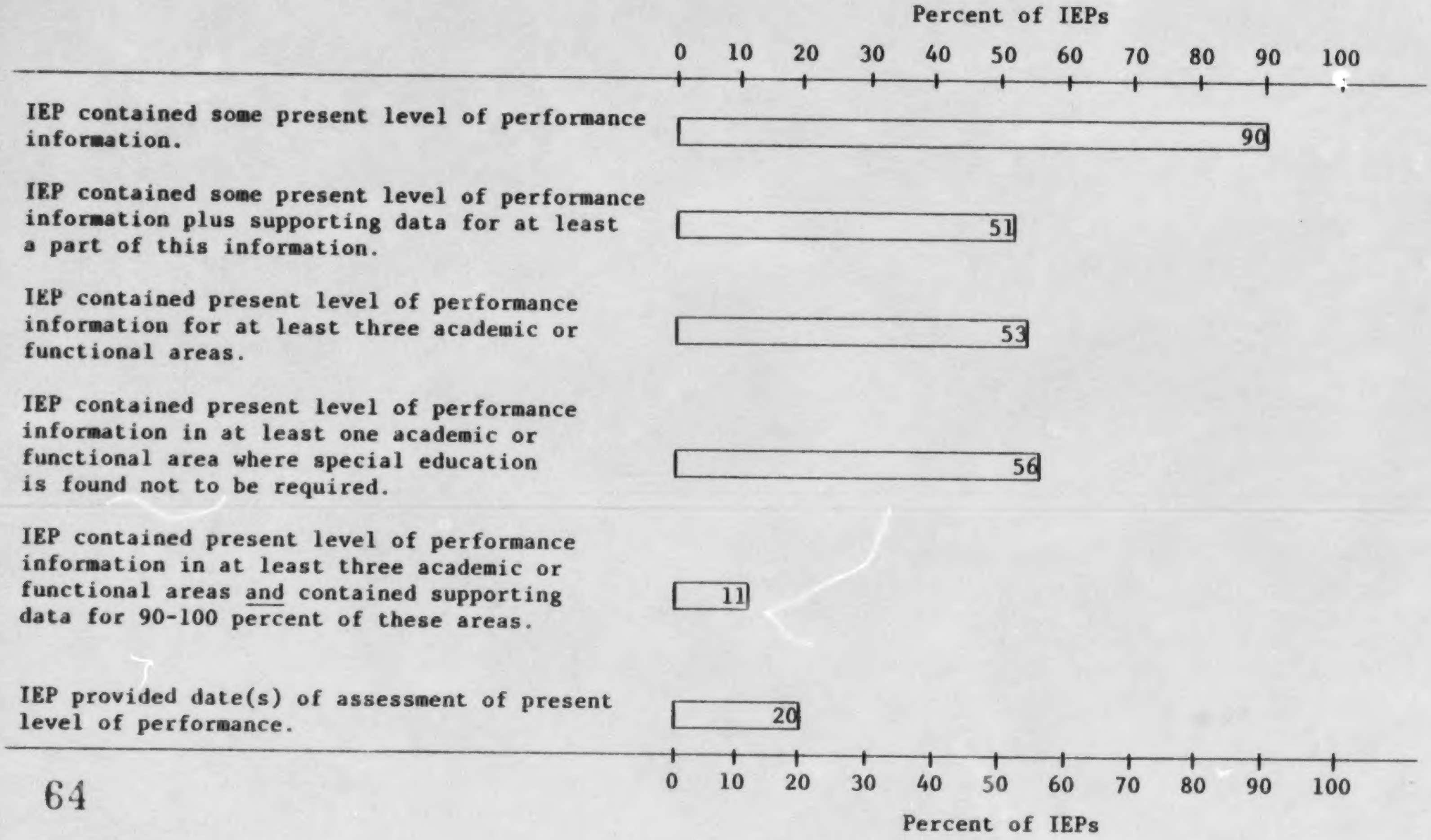


Figure 4.3. How Present Level of Educational Performance Information Is Presented in IEPs.

number of goals (for all of the IEPs) ranged from 0-143 (see Table D.6). However, 50 percent of the IEPs contained fewer than 3.2 goals. (Because of the small percentage of IEPs that contained a very large number of goals, the median may be a better measure than the mean of the central tendency of the distribution of the number of goals found in IEPs.)

Ninety-nine percent of the IEPs that had a heading for annual goals actually included annual goals. On the other hand, only 16 percent of the IEPs that did not have such a heading actually included goals. (See Appendix D, pages D.3-D.5 for calculations.)

As was noted in Chapter 3, the format of 12 percent of IEPs was such that the parental approval of the IEP would be for the annual goals but not for the short-term objectives. (Some school districts do not initially include short-term objectives in the IEP. Instead, these are developed after the student is placed in special education.) Since the short-term objectives (or, in the absence of short-term objectives, the annual goals) generally are the best and sometimes the only descriptor of special services to be provided, one would expect, and the Act mandates, that the IEP contain information that would permit one to determine whether or to what extent the objectives are met. While one generally would not expect annual goals to be written in measurable terms, a unique situation is presented in those 12 percent of the cases where the parental approval is for annual goals but not for short-term objectives. In these cases there appears to be some justification for expecting the IEP (as approved by the parent) to include information that would permit one to determine whether or to what extent the goals are met. To this end, data were collected to ascertain (1) what proportion of IEPs contained annual goals that included (either as a part of the goal statement or as a separate statement anywhere in the IEP) a logical statement of expected behavior to a specified standard, and (2) what proportion of IEPs, for which parental approval is for annual goals, only included such statements.

As would be expected, only a small (14.3 percent with a standard error of 9.0) proportion of IEPs contain even one goal statement that included criteria for determining whether or to what extent the goal is met. There was no change in this proportion for the 12 percent of IEPs with a format in which parental approval would be for the annual goals only (the proportion for this group was 16 percent, with a standard error of 4.7). This would indicate that most IEPs that use this particular type of format do not include criteria for evaluating the special education services to be provided.

Another factor related to how annual goals were presented in IEPs is that in addition to merely listing annual goals, some IEPs either listed the goals in order of priority or selected certain listed goals for priority status. Though not required by P.L. 94-142, such a priority listing could help to insure that high priority goals are included in instructional programs. Fifteen percent of the IEPs included this additional refinement.

c. Short-Term Objectives

The following discussion of how short-term objectives were presented in IEPs focuses on: (1) the number and range of objectives included in IEPs, (2) the time frames for meeting the objectives, (3) the extent to which objectives were presented in measurable terms, and (4) the extent to which the objectives were selected from a standard curriculum.

The average number of short-term objectives per IEP (in the 91 percent of IEPs that contained short-term objectives) was 26, with a standard deviation of 48. The range of objectives (for all of the IEPs) was 0-1002. Because a relatively small proportion of IEPs contained a very large number of objectives (about 3 percent contained more than 100 objectives), there was a considerable discrepancy between the mean (around 26 objectives) and the median number of objectives (around 11), and the median is a better measure of the central tendency. (See Table D.7.) In general, these measures suggest a reasonable balance between the number of goals and objectives, with an average of around four to five objectives (considering both the median and mean) for every goal. Ninety-seven percent of the IEPs that had a heading under which to list short-term objectives actually included objectives. On the other hand, only 25 percent of the IEPs that did not have such a heading actually included short-term objectives (see Appendix D, pages D.3-D.5, for calculations).

Based on information in the IEPs, approximately two-thirds (65 percent) of the short-term objectives were to be worked on throughout a full year, while not quite one-third (32 percent) were to be accomplished in less than a year. A time frame for the remaining three percent could not be determined from the IEPs (see Table D.8).

In 46 percent of the IEPs, not one of the short-term objectives was written in measurable terms; i.e., none of the IEPs contained a precise statement of how the objectives should be evaluated. (See row totals of Table D.9.) Only about one-third of all the short-term objectives listed in the "average" IEP were written in measurable terms. (See row totals of Table D.9.) These data are based on an evaluation of the short-term objectives, including any additional pertinent evaluation criteria listed anywhere in the IEP. Since this property of short-term objectives is directly related to the mandate of the Act that IEPs contain objective criteria for determining whether instructional objectives are being met, this subject will be discussed in greater detail in subsection "h" (Proposed Evaluation Criteria).

A very small proportion of Basic Survey IEPs (.02 percent with a standard error of 0.1), presented short-term objectives by referencing an established curriculum (that is, a list of objectives available to all special education teachers in the school or school district). These references to standardized lists of objectives generally were presented by noting the number and source of each objective (e.g., one IEP might list as objectives "objectives 1-8 of Section A of Standard Curriculum III"). Because of the very small numbers involved, no further analysis of these data appears warranted.

d. Statement of Specific Educational Services to be Provided

The Act requires that an IEP include a statement of specific educational services to be provided. There would appear to be a number of ways by which this requirement can be met. For example, an IEP may include (1) a heading requesting a statement of specific special education services to be provided, (2) a listing of annual goals and/or short-term objectives for each specific service, and a (3) separate listing in the IEP of a related service to be provided. When using these criteria, 99 percent (with a standard error of 0.5) of IEPs provided such information. Following is a brief discussion of each of these three major approaches to providing this mandated information.

Eighty-one percent of IEPs included a heading requesting a statement of specific educational services to be provided (see Table D.4). In 85 percent of these cases, the typical IEP contained under the heading a brief descriptor of the proposed special education placement (e.g., resource room, speech therapy, learning lab). The reason for the lack of particularly meaningful data listed under such headings seems obvious. The majority of IEPs included elsewhere in the document a placement recommendation, and the majority of IEPs listed the proportion of the student's time assigned to this placement. Almost all IEPs included the annual goals or the short-term objectives toward which the specific services would be directed. Given this abundance of service information already entered in the IEP, those who prepared the IEPs apparently were in the position of not having any particularly meaningful and new information to list under the services heading. As a result, they generally repeated information already provided elsewhere in the IEP or left the space blank.

The major means by which IEPs included a statement of specific educational services to be provided was by including the annual goals and short-term objectives which the educational program presumably is designed to meet. This strategy, which was employed for 99 percent of the IEPs, was discussed in the two previous subsections.

A final means of stating specific services was by listing related services (e.g., transportation, psychological services, physical therapy). Thirteen percent of IEPs included at least some related services information. This is discussed in greater detail in Chapter 6.

e. Statement of Extent to Which Student will be Able to Participate in Regular Education Programs

Seventy-seven percent of the IEPs included a heading for a statement of the extent to which the student would be able to participate in regular education programs. (See Table D.4.) Some type of information was provided under these headings 87 percent of the time (see footnote 1). Such information rarely was provided if a heading requesting the information was not provided. Either of two basic approaches to providing the information generally was followed. These were: (1) some IEPs listed, either as proportion of time or in minutes, hours, or class periods, the time the student would be assigned to the regular education program; and (2) some IEPs used the reverse approach and listed the proportion or amount of time that the student would be assigned to special education. Either approach provides the necessary information.

f. Projected Date for Initiation of Specific Services

Two approaches were used in IEPs to state the projected date(s) for initiation of services. These were: (1) to specifically state that the special education services will begin on a certain date; and (2) to provide proposed dates for beginning work toward meeting the listed annual goals and/or short-term objectives. The first approach was used in 66 percent of the IEPs; the latter was used in 19 percent. It should be pointed out, however, that the 19 percent included IEPs in which the beginning dates were provided for only a portion of the goals or objectives. If the beginning date was provided for as few as one goal or one objective, the IEP was included in this category. Also, for this latter category, dates often were provided by listing the month but not the day of the month, or by noting that the IEP was, for example, for the 1978-79 school year. (The assumption here is that service is initiated at the beginning of the school year.) With these allowances, a reasonably clear statement requiring a minimum of inferences was presented in 66 to 85 percent of IEPs.

An additional 15 percent of the IEPs included the date that the IEP was prepared. While this is not necessarily the same as the date of initiation of service, the approximate service date usually could be inferred.

Only a negligible .7 percent of IEPs provide no information from which the initiation date can be ascertained or inferred. (See Table D.10 for additional information.)

As with a number of other types of data, the specificity of beginning-of-service data has a direct relationship to the inclusion of headings under which to enter the data. Of the 89 percent of IEPs that contained a heading (either with the annual goals, with the short-term objectives, or as a separate item) under which to include beginning-of-service data, at least 91 percent included quite specific information. Of the remaining 11 percent that did not include such headings, only about 21 percent included specific information. (See Appendix D, pages D.3-D.5, for calculations.)

g. Anticipated Duration of Specific Services

As with beginning of service, IEPs stated the anticipated duration of service: (1) by specifically stating the beginning and ending dates of service (or stating the length of service); or (2) by providing information regarding the length of time proposed for meeting one or more annual goals or objectives. In both cases, the duration generally was stated in reasonably precise terms. The first approach was used in 49 percent of IEPs; the second approach was used in 25 percent. An additional 18 percent of IEPs inferred the duration of service by stating that the goals of the special education program were "annual" goals. Another three percent of IEPs stated that services would be provided "as long as needed." Only five percent of IEPs failed to provide information from which anticipated duration of service could be ascertained or inferred. (See Table D.11 for additional information.)

Of the 80 percent of IEPs with a heading requesting duration-of-service information, at least 83 percent provided quite specific information. Of the

20 percent without such headings, only about 22 percent provided specific data. (See Appendix D, pages D.3-D.5, for calculations.)

h. Proposed Evaluation Criteria

The Act states that an IEP shall include "appropriate objective criteria ... for determining whether instructional objectives are being achieved." (It is assumed that "instructional objectives" as used in the Act refers primarily if not exclusively to the "short-term objectives" mandated to be included in IEPs.) As was noted in subsection c, two approaches were used for presenting these evaluation criteria in IEPs. First, the IEP included a heading under which the evaluation criteria were presented, and second, the short-term objectives were written in measurable terms (thus including within the objective statement the criteria for achievement). With the first approach, for example, the IEP might list under a heading requesting evaluation criteria data that "the student will score at least the grade 4.5 level on the mathematics section of the XXX test battery." With the second approach, a particular short-term objective might be stated as follows: "Given 25 randomly constructed 2-digit x 2-digit multiplication problems, the student, using paper and pencil, will correctly solve at least 80 percent of them in 25 minutes."

As was shown in Figure 4.1, 65 percent of IEPs included proposed evaluation criteria. The basis for this datum, as noted in Appendix D, page D.2, is that the IEP included either (1) a heading requesting proposed evaluation criteria, with reasonably appropriate information entered under the heading, or (2) at least one short-term objective written in measurable terms. Of the 53 percent of IEPs that had a heading requesting evaluation criteria, 79 percent had reasonably appropriate information entered under the heading. (See Table D.4 and footnote 1.) However, this percentage could be misinterpreted without an understanding of what was considered "reasonably appropriate information." In order to be consistent with the guidelines regarding inclusion of data under headings used for all other IEP headings, a quite generous interpretation of "reasonably appropriate" was used. For example, such statements as "passes teacher-made tests," "as determined by grades or daily lessons," or "completes most assignments on time" were considered reasonably appropriate. The criterion for inclusion in the second category, that of measurable short-term objectives, was more strict but also more narrowly based. For example, a short-term objective was required to include a logical statement of expected behavior to a specified criterion in order to be considered measurable.

However, if only one objective in the IEP was written in measurable terms, the IEP was considered to include proposed evaluation criteria and thus was included in the 65 percent figure displayed in Figure 4.1.

It is critical to note that in reviewing a short-term objective to determine whether or not it was written in measurable terms, any related information listed elsewhere in the IEP under an evaluation criteria heading was considered to be a part of the short-term objectives. For example, if short-term objectives such as "will improve in reading comprehension," "will increase reading skills," and "will learn to spell new words" were included in the IEP; and if the IEP stated that the evaluation criterion for the IEP was that the student score at the grade 4.5 level of the language skills section of the XXX test battery, the three example objectives would, based on the latter statement, be considered to have been written in measurable terms. As was noted in subsection c, only 54 percent of IEPs included one or more short-term objectives written in measurable terms. This means that, by using the less generous guideline of including only IEPs with objectives written in measurable terms, only 54 percent (instead of the 65 percent shown in Figure 4.1) of IEPs provided evaluation criteria. Further, as is shown in Table D.9, only 36 percent of IEPs included evaluation criteria for 50 percent or more of the short-term objectives, and only 18 percent of IEPs included evaluation criteria for 90 percent or more of the short-term objectives.

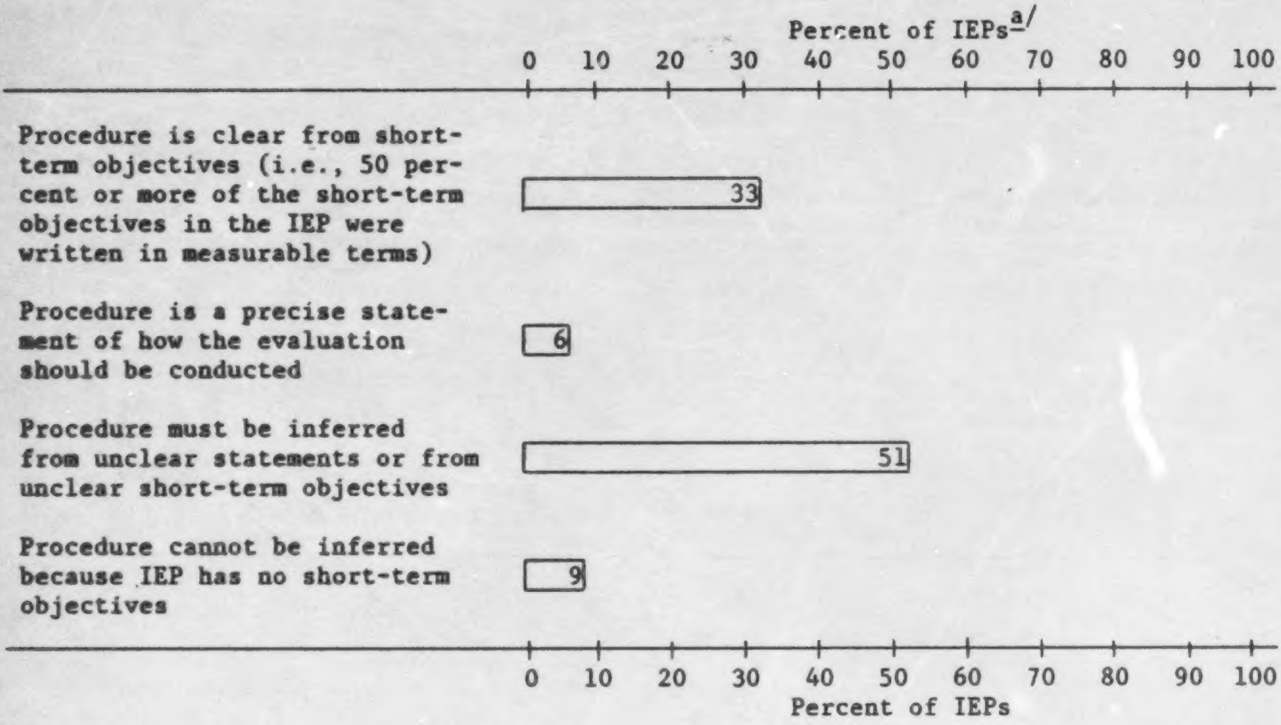
As can be gathered from the above discussion, the relationship between inclusion of a heading requesting evaluation criteria and the actual inclusion of such data depends upon the guidelines used to determine inclusion of the data. If one considers as acceptable either the inclusion of a vague evaluation criteria statement under a heading or the inclusion of at least one objective written in measurable terms, a minimum of 79 percent of the IEPs with such a heading included the data while a maximum of 49 percent of IEPs without such a heading included the data. (See Appendix D, pages D.3-D.5, for calculations.) However, if the more rigid guidelines of not including vague evaluation criteria statements are used, there was no particular relationship between the inclusion of headings requesting the data and the actual inclusion of such data. One conclusion that can be drawn from this finding is that many of the IEPs that provide specific evaluation criteria for the short-term objectives do so by including short-term objectives that are written in measurable terms. Such an approach makes unnecessary the inclusion of a specific heading requiring evaluation criteria.

i. Proposed Evaluation Procedures

As was portrayed in Figure 4.1, 91 percent of IEPs include proposed evaluation procedures for evaluating the short-term objectives. However, as is portrayed in Figure 4.4, a considerable portion of this 91 percent is included based on inferences rather than clear statements. Basically, the difference between the guidelines used for evaluation procedures and those used for evaluation criteria was that a short-term objective written in measurable terms was one means of meeting the evaluation criteria requirement, while the mere inclusion of a short-term objective (whether or not written in measurable terms) was considered to satisfy the requirement for evaluation procedures. While this decision was somewhat arbitrary, reasonable justification appears to exist. If an objective is not written in measurable terms, an impartial evaluator generally would have no basis for determining whether or not the objective had been met. For example, for the objective that states that the student "will learn multiplication tables," one would have no way of knowing what numbers were to be included in the multiplication tables or what level of performance would be acceptable as a measure of success. On the other hand, for the same objective, the procedure for evaluating the objective could be assumed. It is reasonably (but certainly not totally) clear that the student would be presented with various multiplication table problems and asked to provide the answers.

Figure 4.4 shows the means by which proposed evaluation procedures were presented in IEPs. In one-third of the IEPs, the evaluation procedures were clear from the short-term objectives. In an additional six percent of IEPs, this information was presented as a precise statement (e.g., "by administering test XXX") of how the evaluation will be conducted. In slightly over half of the IEPs, the procedures for evaluating most of the objectives had to be inferred from unclear statements or unclear objectives. In the remaining nine percent of the IEPs, procedures for evaluating the objectives were not applicable, since there were no objectives to evaluate.

The exact relationship between a heading on the IEP requesting evaluation procedures and the actual inclusion of that data was not computed. However, it can be noted that of the 40 percent of IEPs that had such a heading, information was entered under the heading 89 percent of the time. (See Table D.4.)



[a] See Table D.12 for actual percentages and associated standard errors.

Figure 4.4. How Proposed Evaluation Procedures Are Presented in IEPs.

j. Proposed Schedules for Determining Whether Instructional Objectives Are Being Met

The Act states that an IEP must include "schedules for determining ... whether instructional objectives are being achieved." Figure 4.5 portrays how these data were provided in IEPs. Only 14 percent of IEPs listed dates and specifically stated that the dates represented the evaluation schedule. However, an additional 36 percent included the dates when work toward meeting short-term objectives was expected to be completed (for at least part of the objectives in the IEP). These dates reasonably could be considered to represent evaluation schedules. For 37 percent of IEPs, while an evaluation schedule was not actually included, it could be inferred from the beginning-of-treatment and end-of-treatment dates. For example, if services to be provided were to begin in September and the IEP was for the 1977-78 school year, it could be inferred that the evaluation schedule was that the short-term objectives would be evaluated at some (or numerous) point(s) between September and the end of the school year. (It should be noted that, for some objectives, a specific evaluation date is not appropriate. For example, an objective such as "will turn in daily assignments at least 75 percent of the time" cannot be evaluated on Tuesday, January 15; it must be evaluated over time.)

Only 13 percent of the IEPs either had no indication of the time frame for the short-term objectives or had no short-term objectives to evaluate.

As was noted above, many short-term objectives must be evaluated over time; a specific evaluation date or dates was not particularly appropriate (e.g., an objective such as "student will turn in all homework assignments on time" or "the student will improve the quality of his social interactions by ..." likely will have to be evaluated continually rather than at a specific point in time). This may be a major reason why a heading requesting evaluation schedules failed to significantly increase the provision of evaluation schedule data. Only about half of the IEPs with such a heading actually included specific schedules under the heading (however, almost three-fourths included some kind of related information under the heading; e.g., "as appropriate" or "daily, weekly, or monthly, depending on nature of objectives").

k. Assurance of at Least an Annual Evaluation

The Act states that the IEP must include criteria, procedures, and schedules for determining, on at least an annual basis, whether instructional objectives are being achieved. By using the various criteria discussed

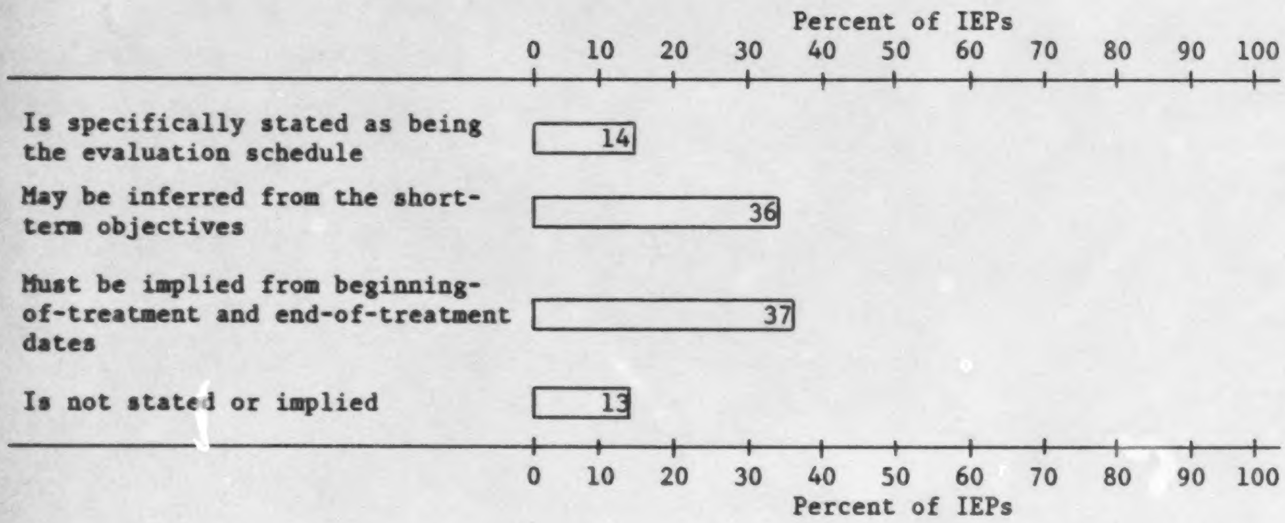


Figure 4.5. How Evaluation Schedules Are Presented in IEPs.[a]

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[a] See Table D.13 for actual percentages and associated standard errors.

in the previous subsection (that is, specific schedules plus time spans inferred from other data on the IEP), the large majority of IEPs (87 percent) required at least an annual evaluation for all of the short-term objectives. Only a miniscule proportion (.3 percent) appeared to require an annual evaluation for part but not all of the objectives. An even smaller proportion (.2 percent) clearly did not require an annual evaluation (e.g., the goals and objectives may clearly be two-year goals and objectives with the evaluation to take place at the end of the second year). The remaining 12 percent of IEPs either had no dates for making inferences or had no short-term objectives to be evaluated. Associated standard errors for these data are presented in Table D.14.

B. Mandated Information in IEPs: Variations by Subpopulations

To determine how the provision of mandated information in IEPs varied by subpopulations, the following areas were investigated:

(1) The extent to which the eleven mandated information items were presented in IEPs.
(2) The number of annual goals in IEPs.
(3) The number of short-term objectives in IEPs.
(4) The proportion of objectives that were written in measurable terms.

For these four areas, variations across the following subpopulations were analyzed:

(1) Regular and special school.
(2) Students of different age levels.
(3) Students with differing severity of handicap.
(4) School districts of different sizes.
(5) School districts having different levels of average annual per-pupil expenditure.

Following is a summary of the results of these analyses.

1. Variations in the Extent to Which the Eleven Mandated Information Items Are Presented in IEPs

The extent to which mandated information was presented in IEPs is quite similar across all of the five categories of subpopulations. Although none of the comparisons resulted in differences that were statistically significant, "suggested" differences were noted in two areas. First, proposed evaluation criteria were found more often in IEPs from regular schools than in

IEPs from special schools.[2] Second, a statement of the extent to which the student will be able to participate in regular education programs appeared less often in the IEPs for the 3-5 age range than for the other three age ranges (see Table D.1), and less often in IEPs from high per-pupil expenditure districts than in IEPs from "low" districts (see Table D.15). Reasons for these differences are not known; however, one possibility for the latter difference is that a higher percentage of children in the 3-5 age range are served in high per-pupil expenditure districts and, since there may not be a "regular education program" for nonhandicapped children in this age group, the data were not provided in the IEP.

2. Variations in the Number of Annual Goals

Both the median and mean number of annual goals in IEPs from special schools are almost double those found in IEPs from regular schools (see Table D.6). No other significant variation in number of goals across subpopulations was noted.

3. Variations in the Number of Short-Term Objectives

Both the mean and median number of short-term objectives in IEPs from special schools are somewhat higher than those found in IEPs from regular schools (see Table D.7). No other significant variation in number of objectives across subpopulations was noted.

4. Variation in the Proportion of Short-Term Objectives Written in Measurable Terms

Though none of the subpopulation comparisons were statistically significant, there appeared to be a trend toward preparing more complete short-term objectives for younger students. While 44 percent of the short-term objectives listed in the "average" IEP prepared for students in the 3-5 age range were written in measurable terms, related findings for the other three age groups were 38 percent for the 6-12 age group, 33 percent for the 13-15 age group, and 28 percent for the 16-21 age group.

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[2] The statistics for this comparison, which were not included as an appended table, are as follows: regular schools (65.6 percent, standard error of 2.2) and special schools (56.6 percent, standard error of 6.1).

II. THE EXTENT TO WHICH NONMANDATED INFORMATION WAS CONTAINED IN IEPs, AND HOW THIS INFORMATION WAS PRESENTED

The presence or absence of nonmandated information was determined directly from the information entered under a heading requesting the information. No attempt was made to determine if information associated with a heading that was left blank was listed elsewhere in the IEP. For example, if space designated for the student's sex was left blank, no attempt was made to search elsewhere in the IEP for that information (e.g., from pronoun genders).

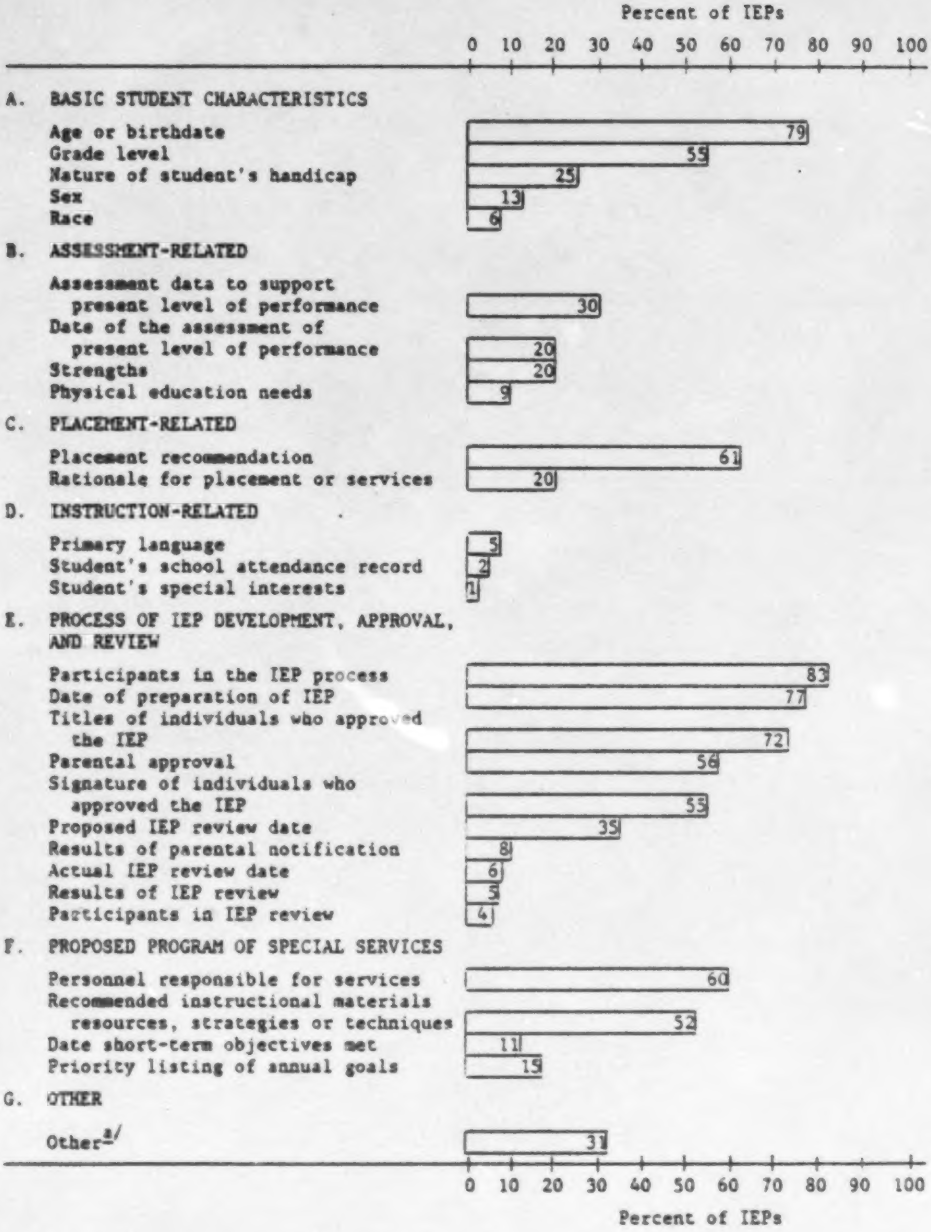
A. Nonmandated Information in IEPs: Basic Survey Population

As can be seen in Figure 4.6, the nonmandated information contained in IEPs was delineated by the seven categories defined and used in Section III of Chapter 3: student characteristics; assessment related; placement related; instruction related; process of IEP development, approval, and review; proposed program of special services; and other miscellaneous information. Specific types of information that occur in less than one percent of the IEPs were grouped in this latter category. (Also see Table D.5.)

With regard to student characteristics, the most common information item was the student's age/birthdate (79 percent); the least common item was the student's race (6 percent).

While each of the four types of assessment-related data (e.g., supporting data, date of assessment, student's strengths, physical education needs) was included in about one-fifth of the IEPs, instructional-related data (e.g., primary language, attendance record, special interests) was included in only about three percent of IEPs. A placement recommendation was provided 61 percent of the time; however, the rationale for placement was provided only 20 percent of the time.

IEPs generally contained more data regarding the IEP development/approval process: 83 percent listed one or more participants in the IEP process, 77 percent contained the date of preparation, 72 percent gave the titles of one or more individuals approving the IEP, 56 percent gave some evidence of parental approval, and 55 percent contained the signatures of individuals approving the IEP. However, very few IEPs documented the IEP review process. It is likely that such reviews had not yet taken place for many of the IEPs because they may have just recently been developed and implemented. (IEPs that are reviewed



[a] IEPs with at least one "other" heading. Includes such headings as: date of referral, provisions for mainstreaming, or last grade obtained, no single one of which occurred in more than one percent of the IEPs.

Figure 4.6. Percent of IEPs with Nonmandated Information.

during the school year usually are reviewed a few months after they have been implemented.) Nevertheless, it appears that greater attention was paid to documentation of the development and final approval of IEPs, than was paid to their review.

Information concerning the proposed program was provided in most instances regarding the personnel responsible for services (60 percent), and recommended instructional materials, resources, strategies or techniques (52 percent). The date short-term objectives were met was provided in only 11 percent of IEPs. A possible explanation for the lack of this latter information is that this information was not yet available for recently developed IEPs.

Other kinds of information were contained in about one-third of the IEPs. No "single" kind of information included in this category occurred in more than one percent of the IEPs.

As can be noted from Table 4.1, the extent to which information was entered under designated headings often was quite low. However, the reason for many of the low completion rates is obvious. For example, the low completion rates in students' school attendance records (48 percent), date short-term objectives met (48 percent), results of IEP review (58 percent), and participants in IEP review (59 percent) provide additional support for the assumption that these headings would be left blank for a significant number of IEPs since the requested information probably would be entered only at certain times; e.g., at the end of an attendance period, after short-term objectives had been met, or after the IEP review had been conducted.

B. Nonmandated Information in IEPs: Variations by Subpopulation

Since the inclusion of nonmandated information depended largely upon the IEP format, variations were evaluated for only two subpopulations: (1) school districts of different sizes, and (2) school districts having different levels of average annual per-pupil expenditure.

1. Variations by School District Size

Only two items of nonmandated information appeared to differ significantly between school districts of differing levels of school enrollment (see Table D.17). First, while the students' age or birthdate was included only 63 percent of the time in IEPs from school districts with a relatively small enrollment, it was included 82 percent of the time in IEPs from medium-enrollment school districts and 85 percent of the time in IEPs from high-enrollment

Table 4.1

COMPLETION RATES FOR HEADINGS REQUESTING NONMANDATED INFORMATION

Non-Mandated Information Area	Percent of IEPs That Have Information Entered[a]
A. BASIC STUDENT CHARACTERISTICS	
Student's age or birthdate	96
Student's grade level	93
Nature of student's handicap	94
Student's sex	94
Student's race	92
B. ASSESSMENT-RELATED	
Assessment data to support present level of performance	83
Date of the assessment of present level of performance	86
Student's strengths	84
Physical education needs	77
C. PLACEMENT-RELATED	
Placement recommendation	94
Rationale for placement or services	88
D. INSTRUCTION-RELATED	
Student's primary language	90
Student's school attendance record	48
Student's special interests	68
E. PROCESS OF IEP DEVELOPMENT, APPROVAL, AND REVIEW	
Participants in the IEP process	96
Date of preparation of IEP	92
Titles of individuals who approved the IEP	95
Parental approval	76
Signature of individuals who approved the IEP	90
Proposed IEP review date	72
Results of parental notification	88
Actual IEP review date	71
Results of IEP review	58
Participants in IEP review	59
F. PROPOSED PROGRAM OF SPECIAL SERVICES	
Personnel responsible for services	90
Recommended instructional materials resources, strategies or techniques	87
Date short-term objectives met	48
Priority listing of annual goals	37
G. OTHER	
Other[b]	82

[a] Percents are based on the number of IEPs that have the heading.

[b] IEPs with at least one "other" heading. Includes such headings as: date of referral, provisions for mainstreaming, or last grade obtained.

districts. And second, while assessment data (e.g., test scores) to support present level of performance was provided only 18 percent of the time in small school district IEPs, these data were provided 34 percent of the time in medium and large school district IEPs.

2. Variations by School District Average Annual Per-Pupil Expenditure

No particular differences were noted in the inclusion of nonmandated information in IEPs from school districts of low, medium, and high average annual per-pupil expenditures.

III. SUMMARY

The two mandated information items that were included less frequently in IEPs were: (a) proposed evaluation criteria, and (b) a statement of the extent of participation in the regular education program. Each of these items was found in about two-thirds of the IEPs; each of the other nine mandated items was found in at least 80 percent of the IEPs.

When the IEPs were analyzed for the number of mandated items of information included within each document, it was found that only about one-third of the IEPs contained all 11 of the mandated information items; about 90 percent of the IEPs contained at least 7 of the 11 mandated items.

Ninety percent of the IEPs contained some present-level-of-performance information. In addition, 51 percent included supporting data, such as test scores, to support the present-level-of-performance information. Fifty-three percent of the IEPs included present-level-of-performance information for at least three academic or functional areas, and 56 percent contained such information for at least one academic or functional area where special education was found not to be required (thus, indicating a student strength). Twenty percent of the IEPs included the assessment dates.

Six percent of the IEPs had no annual goals, and nine percent had no short-term objectives. Although those IEPs that had at least one goal statement had an average of about six annual goals, the median was just over three. One of the more surprising findings was the percentage of IEPs that contained an extremely large number of objectives: about 11 percent contained 51 or more objectives, and about 3 percent contained over 100 objectives. The mean number of objectives per IEP was 26, while the median was around 11. Only about one-third of all the short-term objectives listed in the "average" IEP were written in measurable terms (even when any additional pertinent evaluation criteria listed anywhere in the IEP was included). In 46 percent of the IEPs, not one of the short-term objectives was written in measurable terms.

Using generous assumptions, it was found that proposed evaluation criteria were included in 65 percent of IEPs. However, only 36 percent of the IEPs included evaluation criteria for 50 percent or more of the short-term objectives, and only 18 percent of the IEPs included such criteria for 90 percent or more of the short-term objectives.

While the beginning date of service and the anticipated duration of service were included in the IEPs 99 and 95 percent of the time, respectively, these data, also, were based upon rather generous assumptions. For 15 percent of the IEPs, the beginning date of service was not specifically stated but was inferred from the date the IEP was prepared. For 19 percent of the IEPs, the duration of service was assumed to be one year based on the notation that the goals were "annual" goals. An additional three percent of IEPs stated that service would be provided "as long as needed."

As with evaluation criteria, the evaluation procedures information, while provided in 91 percent of IEPs, often was not clearly stated. Only 40 percent of the IEPs provided a clear statement of evaluation procedure for 50 percent or more of the short-term objectives included in the IEP.

The schedule for evaluating the short-term objectives was clearly stated in only 40 percent of the IEPs. However, in an additional 37 percent, the evaluation schedule could be roughly estimated from the beginning-of-treatment and end-of-treatment dates.

A considerable amount of nonmandated information was included in the IEPs. The students' age or birthdate was provided 79 percent of the time, a placement recommendation 61 percent of the time, participants in the IEP process 83 percent of the time, personnel responsible for service 60 percent of the time, and recommended instructional resources/strategies 52 percent of the time.

There was a direct relationship between the inclusion of information in IEPs and the IEP format headings. For both mandated and nonmandated information, the inclusion in the IEP format of a heading requesting the information was likely to result in the inclusion of the information. Without the heading, the information more likely was not included.

Chapter 5

Who Participates in the Development and Approval of IEPs?

The process of developing IEPs and the types of personnel involved in that process are very important, because the end product or the IEP itself reflects the extent and quality of the participation of those who have been active in developing it. P.L. 94-142 specifies that the handicapped student's teacher, a representative of the public school agency, one or both of the student's parents or guardians, and "other individuals at the discretion of the parent or agency" should participate in the development of an IEP.

Two data sources were used to provide information about who participated in the development of IEPs: (a) an IEP evaluation checklist used to document data from the IEP; and (b) a survey questionnaire completed by teachers. The IEP Evaluation Checklist was used to examine the extent to which IEPs specified who participated in the process of developing the IEP. It also was used to determine to what extent parental, guardian, or surrogate approval of the IEP was indicated in the IEP itself. The Act does not require that participants be listed in the IEP, and it was found that in many cases not all of the participants in developing the IEP were identified on the IEP itself and that sometimes those who approved the IEP signed a separate approval form that was not included with the IEP.

Consequently, a teacher survey, using a brief questionnaire, was designed to provide additional information about parent and student participation. Teachers were asked to recall the handicapped student's and parent's participation in developing the IEP and to respond to a number of questions about that participation. The teacher most knowledgeable about the student's IEP, whether a regular classroom teacher, special education teacher, or therapist, was the one selected to respond to the survey questionnaire. In cases where teachers other than the responding teachers might have better knowledge about specific survey questions, the responding teachers were encouraged to check with them for assistance in responding to the survey. In spite of these considerations, the survey data were affected by a lack of complete teacher recall, since many of the IEPs for which the information was collected during the spring, had been developed during the fall of the current school year or during the spring of the previous school year.

The two data sources were designed to be complementary, answering somewhat different but closely related subquestions. Results from the two usually differ slightly concerning similar information. Both sources of information should be studied together to gain insight into parent and student participation in developing IEPs.

This chapter examines the participation of school personnel, parents, and students in the development of IEPs. From the two sources of data it is possible to answer the questions: What is the extent of participation of various persons in developing the IEP? Who signs and approves the IEP? Two additional questions will be answered: Does participation in the development of IEPs vary within subpopulations of students defined by student's age, attendance in regular or special schools, severity of handicapping condition, and per pupil expenditure in the district? What proportion of IEPs are produced by committees including at least one representative from each of the three types of persons mandated by P.L. 94-142 to be included: teachers, parents, and LEA representatives?

Section I discusses the involvement of various types of school and district personnel in developing and approving IEPs, while Section II discusses the involvement of parents and students. Section III shows the degree to which IEP committees included the participation of at least one member from the three categories mandated by P.L. 94-142. A summary is presented at the end of the chapter. Detailed descriptive statistics and associated standard errors for the results presented in this chapter are included in Appendix E.

I. WHAT SCHOOL PERSONNEL PARTICIPATED IN THE DEVELOPMENT AND APPROVAL OF IEPs?

Those whose names and/or titles appeared on the collected IEPs were considered to be participants in the IEP development process. As previously noted, the Act does not require that IEPs contain a listing of the persons who participated in their development. Therefore, these data are probably underestimates of the number of persons involved in the development and approval of IEPs.

Fifteen different types of school personnel were identified from the IEPs as participants. These personnel types were subdivided into three categories: teachers and therapists; administrative representatives; and ancillary personnel such as school psychologists or counselors. Another category was added for those without an identification of title or position, or those whose positions were not listed. (See Appendix E, Table E.1 for a listing of personnel included in each category.)

A. Basic Survey Population

Ninety-two percent of the IEPs listed at least one participant, and 82 percent included at least one signature. No IEPs had an indication of parental participation or approval without indication of participation or approval by at least one person from the school organization. Across all IEPs with at least one participant, the mean number of participants was 4.0; and across all IEPs with at least one signer, the mean number of signatures was 3.6.

Table 5.1 shows that at least one representative from the category of teachers and therapists was specifically identified as a participant in 74 percent of the IEPs, administrators in 60 percent, and ancillary personnel (e.g., school psychologists, counselors, social workers, nurses) in 24 percent. In 28 percent of the IEPs at least one other participant was identified who could not be classified by title or who held positions that could not logically be included in the other categories. The table further indicates that 50 percent of the IEPs specifically identified both a teacher or therapist and an administrator. These are the two types of school personnel mandated by P.L. 94-142 regulations to be participants on the IEP committee, in addition to the parent.[1] (See Appendix E, Table E.1.)

The mean numbers of participants, by category of school personnel, across IEPs with at least one participant indicated, were as follows: teachers and therapists, 1.39; administrative personnel, 0.91; ancillary personnel, 0.37; and could not classify and other, 0.58. (See Appendix E, Table E.17.)

Table 5.1 also indicates the percent of IEPs signed by participants from various categories. Significantly fewer participants signed IEPs than were named on them. This could be due to a number of reasons, including the

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[1] The percents presented and discussed in this section are based on the total number of IEPs, as opposed to being based only on those IEPs that listed at least one participant (or one signer). Since a large proportion of IEPs contained at least one participant (92 percent) or signer (82 percent), a change in the bases would result in an increase of only two to four percentage points for any one of the various categories of participants or signers.

Table 5.1

CATEGORIES OF SCHOOL PERSONNEL WHO PARTICIPATED IN THE IEP PROCESS

Categories of Participants	Percent Of IEPs with Participation Category Represented	
	Participant	Signer
Teachers and therapists	74	59
Administrative personnel	60	51
Both of above	50	40
Ancillary personnel	24	19
Could not classify and Other	28	22

likelihood that many participants were not expected to sign the actual IEP but were to indicate approval on a separate form.

Table 5.2 presents the participation rates for those types of school personnel who were identified as participants on at least 10 percent of the IEPs. (See Appendix E, Table E.1 for a complete list of participants and signers.) Principals were identified as participants most often, 34 percent of the time. Special education teachers (33 percent) and speech and language therapists (20 percent) were identified more often than regular classroom teachers (13 percent). Other school personnel identified in less than 10 percent of the IEPs were physical and occupational therapists, physical education teachers, school representatives, supervisors, social workers, and nurses.

Table 5.2

TYPES OF SCHOOL PERSONNEL WHO PARTICIPATED IN THE IEP PROCESS

Type of Participant	Percent of IEPs with Participation Type Represented
Principals	34
Special education teachers	33
Speech and language therapists	21
LEA representatives	21
Case managers	16
School psychologists	14
Regular classroom teachers	13
Counselors	10

B. Variation by Subpopulations

The participation of school personnel in the development of IEPs was analyzed for subpopulations within four reporting variables: student age; type of school; severity of student handicap; and district per-pupil expenditure. Comparisons were made for participation, but not for signing; these comparisons were made for the categories of participants shown in Table 5.1 and for the types of individual school personnel shown in Table 5.2 and Appendix Table E.1.

1. Student Age Levels

To determine whether or not the participation of school personnel varied significantly with the student's age, IEPs were examined according to four student age groups: 3-5, 6-12, 13-15, and 16-21. (See Appendix E, Tables E.2-E.5 and E.17.) Differences across age groups were not statistically significant for any of the various categories of school personnel. However, the differences for ancillary personnel were large enough to be suggestive of greater participation at the older levels (13-15 and 16-21) than at the other two levels.

Within the category of ancillary personnel there were some statistically significant differences in the participation rates of counselors. They participated more heavily at the older levels (13-15 and 16-21) than at ages 6-12, and the results were suggestive of a trend for greater participation of counselors as age increases, especially from age 6 through age 21.

Another individual type of school personnel for which there were significant differences in participation across ages was speech and language therapists. They participated more heavily in the development of IEPs at the younger ages (3-5 and 6-12) than at the other two levels. Also, the results for those participants who could not be classified because of a lack of title or position showed that there were significantly more of these at ages 3-5 than at the other age levels.

2. Regular and Special Schools

Differences in participation rates for various categories of school personnel were not statistically significant between regular and special schools. For ancillary personnel the difference was suggestive of greater participation in regular schools, with at least one person from this category indicated as a participant in the IEP development process on 24 percent of the IEP's in regular schools and on 16 percent in special schools. (See Appendix E, Tables E.6 and E.18.)

There were significant differences in the rates of participation for some individual types of school personnel. Within ancillary personnel there was greater participation of social workers in regular schools, and the magnitude of the difference in participation by counselors was suggestive of greater participation in regular schools. Other types of participants with higher rates of participation in regular schools were: special education teachers and speech or language therapists, and the results for regular classroom teachers were suggestive of greater participation in regular schools. Physical or occupational therapists had higher rates of participation in special schools and the results for physical education teachers were suggestive of greater participation in special schools.

3. Severity of Student Handicap

There were no statistically significant differences in the participation rates for various categories of school personnel or for individual types of school personnel when students were classified by mild, moderate and severe levels of handicap. The participation rates for LEA representatives were suggestive of greater participation in the development of IEPs for students with severe levels of handicapping (26 percent) than for students with mild levels (19 percent). (See Appendix E, Table E.7.) A difference in this direction might be expected because of the more complex educational problems involved with the severely handicapped and because many school districts have only recently begun to work with the severely handicapped student.

4. District Per-Pupil Expenditure Levels

Participation rates for the category "teachers and therapists" were significantly greater in school districts with low levels of per-pupil expenditure than in school districts with medium levels (almost 83 percent of the IEPs developed in "low" districts indicated participation of at least one person from this category versus 72 percent in "medium" districts). The difference in participation rates between "low" and "high" districts (83 percent versus 71 percent) was not statistically significant but was large enough to be considered suggestive of greater participation in "low" districts. (See Appendix E, Table E.8.)

Looking at the category that was defined to include at least one representative from the category of "teachers and therapists" and one from the category of "administrative representatives," participation rates in school districts with low levels of per-pupil expenditure were significantly greater than those with either medium or high levels. In "low" districts participation of at least one person in this category was indicated on 61 percent of the IEPs, while the rates for "medium" and "high" districts were 48 and 45 percent respectively. (See Category 8 in Table E.8.)

Within these two categories of school personnel there were some significant differences in participation rates of individual types of personnel. Classroom teachers participated more in "low" districts (25 percent of IEPs) than in either "medium" (10 percent) or "high" districts (9 percent). Special education teachers participated more in "low" districts (44 percent) than in "medium" districts (29 percent), and the difference between "low" and "high" districts (44 percent versus 29 percent) was suggestive of greater participation in "low" districts.

For the category of ancillary school personnel the participation rates for "medium" and "low" districts (28 percent and 19 percent respectively) were suggestive of greater participation in "medium" districts. Within this category the participation rates for school psychologists (8 percent in "low" districts, 14 percent in "medium" and 17 percent in "high") were suggestive of greater participation in both "medium" and "high" districts than in "low" districts. It may be that ancillary personnel are not as prevalent in districts with low per pupil expenditures.

II. HOW DID PARENTS AND STUDENTS PARTICIPATE IN THE IEP PROCESS?

A. Basic Survey Population

Sixty-three percent of the IEPs included specific indication of the participation of a parent, guardian, or surrogate while 57 percent of the IEPs were signed by one of these three.[2] (See Appendix E, Table E.1.) Teachers in the teacher survey indicated that over 75 percent of the parents or guardians signed and/or verbally approved the IEPs and that less than 1 percent of the parents indicated their refusal to approve an IEP. (See Appendix E, Table E.9.)

Teachers also indicated that over 75 percent of the parents or guardians did discuss the completed IEP with the teacher or other school personnel and 55 percent of the parents met with the IEP committee to discuss the developed IEP. Because the intent of P.L. 94-142 was to involve parents in the actual development of the student's program, teachers were asked whether or not the parents or guardians provided input during the IEP meetings that they attended. The teachers indicated that approximately one-half the parents (49 percent) attended the IEP development meeting and presented input during the meeting. A serious question can be raised, therefore, about the extent of parent participation during the development of IEPs, as teachers reported that parents did not have input in approximately half the cases.

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[2] P.L. 94-142 does not require that the IEP be signed by the student's parent, guardian, or surrogate.

The regulations of P.L. 94-142 do not require student participation, but they do suggest that students be involved in the development of their own IEPs whenever "appropriate." Because many handicapped students may be perceived by school personnel or parents as being too young, too immature, and/or too handicapped to be meaningful participants, it would not be expected that there would be high rates of student participation. Less than three percent of the IEPs indicated the participation or signature of the handicapped student on the IEP itself. (See Appendix E, Table E.1.) Teachers, on the other hand, indicated that 35 percent of the students had discussed their IEPs with school personnel and that 10 percent participated and provided input into the IEP process. (See Appendix E, Table E.9.) Although the levels of student participation reported by teachers are encouraging relative to those indicated on IEPs, they are not high enough to enable an affirmative answer to the question of whether the regulations of P.L. 94-142 are being met in terms of student participation whenever "appropriate."

B. Variation by Subpopulations

The participation of parents and students in the development and approval of IEPs was analyzed for subpopulations within four reporting variables: student age; type of school; severity of student handicap; and district per-pupil expenditure. From information in the IEP, comparisons were made for participation, but not for signing. (See Appendix E, Table E.1.) From the teacher survey comparisons were made for the affirmative teacher responses to the questions displayed in Table 5.3 and Appendix Table E.9.

1. Student Age Levels

Parent participation in developing the IEP was examined across the four age groups: 3-5, 6-12, 13-15, and 16-21. (See Appendix E, Tables E.1-E.5 and E.9-E.13.) Data from the teacher survey are displayed in Table 5.3, which presents the percents of teachers' affirmative responses to several questions.

Table 5.3

TEACHERS' AFFIRMATIVE RESPONSES CONCERNING THE NATURE OF PARENT PARTICIPATION IN THE IEP DEVELOPMENT, BY STUDENT AGE

Nature of Participation	Percent of Teachers' Affirmative Responses				
	3-5	6-12	13-15	16-21	Total
Did a parent or guardian approve by signing?	95	78	71	68	76
Did a parent or guardian discuss the completed IEP with school personnel?	92	77	71	70	76
Did a parent or guardian meet with the IEP committee?	72	59	47	43	55
Did a parent or guardian participate in the development of the IEP?	59	53	42	39	49

These results indicate an overall trend for less parent participation as the age of the student increases, especially for signing the IEP and discussing the completed IEP. The trend appeared to be similar, but not quite as strong, for a parent meeting with the IEP committee and for a parent actually participating (giving input) in the meeting.

Analysis of information in the IEP itself revealed no statistically significant trend for degree of participation by parents, guardians or surrogates across age levels.

Student participation across the four age levels also was examined from both data sources. No trend could be detected from data on actual IEPs, because only three percent of the IEPs included an indication of student participation across all age groups. (See Appendix E, Tables E.1-E.5.)

When teachers' responses to questions about student participation in developing IEPs were analyzed by age of the handicapped student, there was a definite pattern of more student participation as age increased. Figure 5.1 shows that only 6 percent of the 3- to 5-year-old students discussed their IEPs with school personnel and that none attended or participated in the development of the IEPs during the meetings, while 28 percent of the 6-12 year olds discussed their IEPs with school personnel and 6 percent participated in

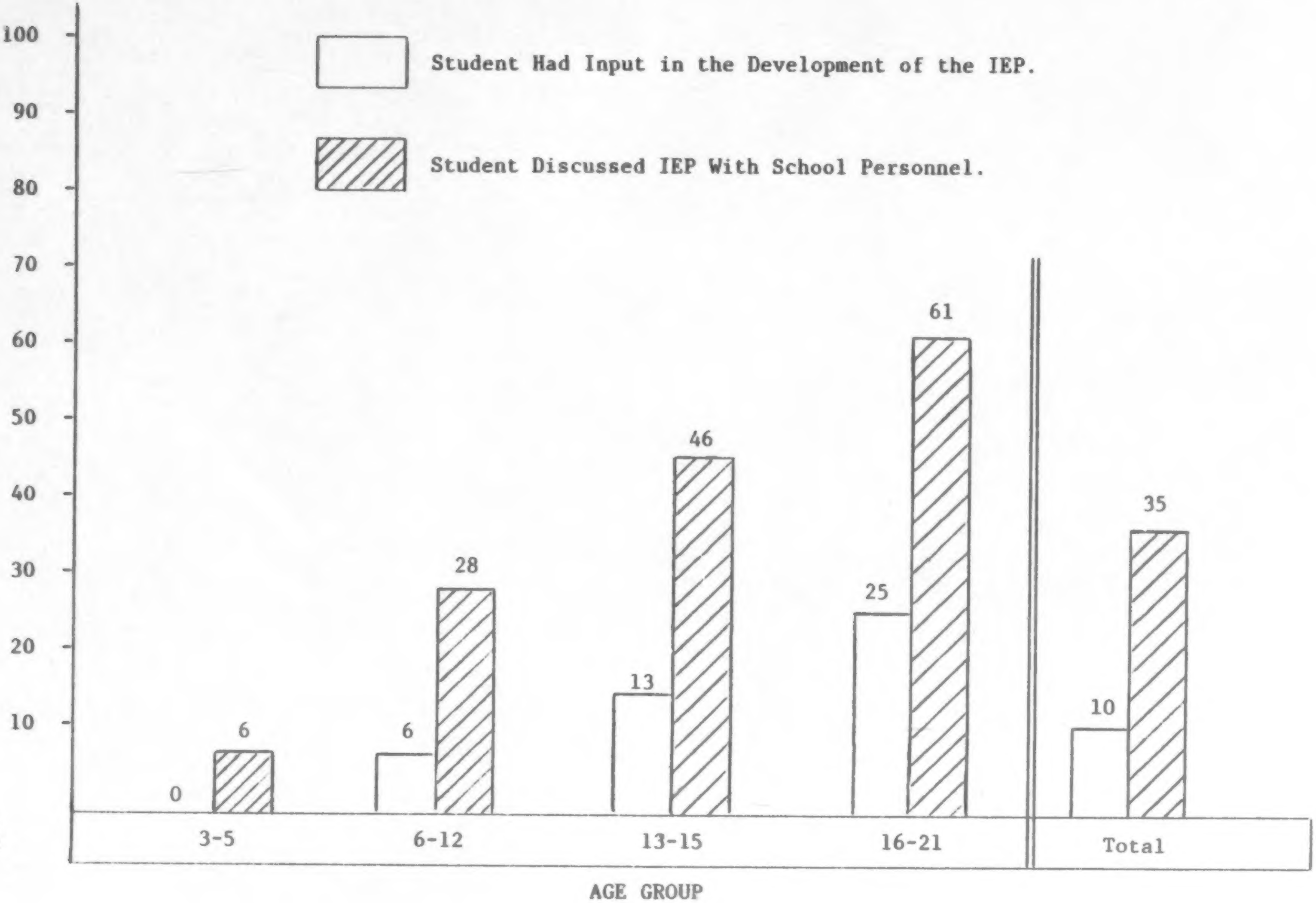

Figure 5.1. Percent of Student Participation in IEP Development by Age Level According to Teacher Response.

the meetings. However, 46 percent of the 13-15 year olds and 61 percent of the 16-21 year olds discussed their IEPs with their teachers; and 13 percent of the former and 25 percent of the latter participated in the meetings.

When teacher survey data concerning parent and student participation are considered together, there is a strong trend indicating increased student and decreased parent participation in developing IEPs as students get older. This trend may reflect both the growing independence of older handicapped students and the changing perceptions of school personnel and parents toward student involvement in the development of their IEPs as they grow older.

2. Regular and Special Schools

When results from both the IEPs and the teacher survey were compared for regular schools and special schools, no significant differences were found in levels of parent participation in the development of IEPs. (See Appendix E, Tables E.6 and E.14.)

Analysis of the results from IEPs revealed no significant differences in student participation in regular and special schools. However, while results from the teacher survey showed no significant differences in the number of students who met with the IEP committee, they did reveal that more students (36 percent) in regular schools discussed their completed IEPs with school representatives than in special schools (24 percent). (See Appendix E, Table E.14.)

3. Severity of Student Handicap

No significant differences were found across the severity levels in terms of student participation in the development of IEPs, either from the IEPs themselves or from the teacher survey. (See Appendix E, Tables E.7 and E.15.)

Although there was not a definite trend across the severity levels (mild, moderate and severe) for all relevant questions, analysis of parent participation data from the teacher survey revealed some differences across severity levels. There was significantly greater participation by parents of severely handicapped students (64 percent) than by parents of mildly handicapped students (51 percent) in meeting with the IEP committee to discuss the developed IEP; and the results for parents of moderately handicapped students (58 percent) suggested that they may have participated more often than parents of mildly handicapped students. Teachers indicated that 82 percent of the IEPs of students with severe handicaps were signed by parents or guardians, and this may have been greater than the 74 percent of the IEPs that teachers indicated as being signed by parents of students with mild handicapping conditions. The results from the IEP itself also suggest greater participation for "severe" versus "mild" handicapping conditions, with 69 percent of the IEPs of severely handicapped students indicating parent participation compared with 61 percent of the IEPs of students with mild handicapping conditions. Greater participation by parents of students with severe handicapping conditions might be expected because of the more complex educational problems faced by the parents, students, and school personnel.

4. District Per-Pupil Expenditure Levels

No significant differences were found between low, medium, and high levels of district per-pupil expenditure for parent participation, either from information on the IEPs or the teacher survey. (See Appendix E, Tables E.8 and E.16.)

In terms of student participation across levels of district per-pupil expenditures no significant differences were found from information on the IEPs. However, there were some differences from the teacher survey. Teachers indicated that more students from districts with both high and medium levels (11 percent in both cases) met with the IEP committee during development than did students from districts with low per-pupil expenditure levels (6 percent). Also, more students from "medium" districts (40 percent) had discussed their IEPs with a school representative than had students from "low" districts (27 percent).

III. PARTICIPATION OF MANDATED PERSONNEL IN THE DEVELOPMENT OF IEPs

A. Basic Survey Population

Three types of persons were mandated by P.L. 94-142 to be included in IEP committees: teachers, LEA administrative representatives, and parents or guardians. Based upon information in the IEPs, only 36 percent list at least one representative from each of these categories as participants, and only 28 percent list one or more of them as signers. (See Appendix E, Table E.1, Category 7.) Although being named in the IEP as a participant in the IEP process is a relatively good index of participation, there are three basic reasons for assuming that participation rates based on IEP data probably are underestimates and do not reflect all those who actually participated in the development of the IEP: (1) P.L. 94-142 does not require that participants be identified in the IEP and, consequently, it is likely that such information is included, e.g., some schools require that the parent sign a separate approval form which is neither included as a part of the IEP nor filed with it; (2) further identification of the specific titles of those persons in the "other" category might increase the number of persons in the mandated categories; and (3) persons with other specific titles, e.g., counselors, could have been participating on IEP committees as LEA administrative representatives. All factors considered, however, these figures suggest a relatively low rate of participation by those mandated to participate.

B. Variation by Subpopulations

The percent of IEPs listing at least one member from each of the three mandated categories as participants was analyzed for subpopulations within four reporting variables: student age; type of school; severity of student handicap; and district per-pupil expenditure. Comparisons were made for participation but not for signing.

1. Student Age Levels

Comparisons of the percent of IEPs listing at least one member from each of the three mandated categories as participants on the IEP committee by four student age levels (3-5, 6-12, 13-15, and 16-21) revealed no significant differences between these groups. (See Appendix E, Tables E.1-E.5.)

2. Regular and Special Schools

There were no significant differences between regular and special schools in terms of the participation of at least one member from each of the three mandated categories on the IEP committee. (See Appendix E, Table E.6.)

3. Severity of Student Handicap

At least one representative from each of the three mandated categories was represented on the IEP committees of severely handicapped students more often (44 percent) than on the committees of mildly handicapped students (34 percent). The magnitude of the difference between the severely handicapped and moderately handicapped (36 percent) was also suggestive of greater participation of mandated personnel. (See Appendix E, Table E.7.)

4. District Per-Pupil Expenditure Levels

Comparisons of the percent of IEPs listing at least one member from each of the three mandated categories as participants on the IEP committee across the three levels of district per-pupil expenditures (low, medium and high) showed no significant differences between these groups. (See Appendix E, Table E.8.)

IV. SUMMARY

This chapter dealt with the questions: Who participates in the development and approval of IEPs? Who signs and approves IEPs? Data from IEPs and from a questionnaire administered in a teacher survey were used to discuss the nature and degree of participation by school personnel, parents, and students in developing and approving IEPs. The proportion of IEPs developed by committees including all personnel mandated by P.L. 94-142 also was discussed, as were the variations in participation among subpopulations defined by student age, attendance in regular or special schools, severity of the handicapping condition, and district per-pupil expenditure levels.

Just over 90 percent of the IEPs listed at least one participant, and just over 80 percent included at least one signature. For all IEPs with at least one participant listed, the mean number of participants was 4.0; and for all IEPs with at least one signature, the mean number of signers was 3.6.

At least one representative from the category of teacher or therapist was identified as a participant on three-fourths of the IEPs. At least one representative from the administrative category participated in developing 60 percent of the IEPs, and ancillary personnel (e.g., school psychologists and counselors) were indicated as participants on 24 percent of the IEPs. Individual types of school personnel most often identified as participants were principals (34 percent), special education teachers (33 percent), LEA representatives (21 percent), and speech and language therapists (21 percent).

Information in IEPs indicated that parents (or guardians or surrogates) participated in developing 63 percent of the IEPs and that they signed 57 percent of them. Results from the teacher survey indicated that over 75 percent of the parents signed and/or verbally approved IEPs and that fewer than one percent refused to approve an IEP. Teachers also indicated the following about parent participation: Over 75 percent discussed the completed

IEP with school personnel; 55 percent met with the IEP committee to discuss the developed IEP; and 49 percent provided inputs to the IEP committee during development of the IEP. A serious question can be raised, therefore, about the fact that parents did not have input into approximately half of the IEP committees.

Student participation or approval was indicated on less than three percent of the IEPs. Teachers, on the other hand, stated that 35 percent of handicapped students had discussed their IEPs with school personnel and that 10 percent provided input during the IEP process. Although the degree of student participation reported by teachers was encouraging relative to that indicated in the IEP, it was not high enough to enable an affirmative answer to the question of whether the regulations of P.L. 94-142 are being met in terms of student participation where "appropriate."

There was a definite trend of decreasing parent participation in the development of the IEP as student age increased. The reverse was true for student participation in the development of the IEP, as student participation increased with increasing age. Results from the teacher survey revealed that while only 6 percent of the students in the 3-5 age range discussed their IEPs with school personnel, 61 percent of the 16-21 year olds had such discussions. Likewise, while none of the students in the 3-5 age range had input to the IEP committee, 25 percent of the 16-21 year olds had input.

Although there was not a definite trend across the three severity levels (mild, moderate, and severe), results from both IEPs and the teacher survey suggested the possibility of greater participation by parents of students with severe handicapping conditions than by parents of students with mild handicapping conditions. Greater participation by parents of students with severe handicapping conditions might be expected because of the more complex educational problems faced by parents, students, and school personnel.

Only 36 percent of the IEPs listed one or more participants from each of the three categories of participants mandated by P.L. 94-142 to be in the IEP committees: teacher, LEA administrative representative, and parent. And only 28 percent of the IEPs listed one or more signers from each of the three categories. Since persons with other specific titles could have participated on committees as LEA administrative representatives, these figures probably are underestimates of the actual percents of participants and signers in these categories. However, these findings suggest a relatively low rate of participation by those mandated to participate.

There was greater participation of at least one representative from each of the three mandated personnel categories on the IEP committees of severely handicapped students (44 percent) than on those of mildly handicapped students (34 percent), and the results suggested there may have been greater participation on the committees of the severely handicapped than on those of the moderately handicapped (36 percent).

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Chapter 6

What Types of Special Education and Related Services Are Specified in IEPs?

This chapter provides information regarding the types of special education and related services specified in IEPs. Generally, special education services were specified in IEPs in the form of statements of need, goals, and objectives, following the mandate provided by the law and regulations. Related services, on the other hand, most frequently were indicated in more general descriptive terms in some part of the document other than where needs, goals, and objectives were located. As a result, they are considered in a separate section of this chapter.

Special education services include at least two main types of activities. The first is assessment and the second is educational programming based on assessment. The assessment service, or the result of it, typically was indicated in the IEP in the section on present level of functioning. The assessment information often focused on both the strengths and weaknesses of a student. Strengths generally were indicated in terms of statements of normal, or better than normal, functioning. Weaknesses generally were listed as statements of need for specific kinds of educational programming.

The first section of this chapter includes a description of the types of assessment services that were indicated in IEPs under the heading of "present level of functioning." The extent to which data were provided to support statements about present level of functioning is included in the second section. The third section provides a description of special education programming as indicated by goal statements. Special education programming indicated by short-term objectives is presented in the fourth section. The types of related services indicated in IEPs are discussed in the fifth section of this chapter. Detailed descriptive statistics and associated standard errors for the results summarized in this chapter are referenced and presented in Appendix F.

For purposes of describing the provision of special education services, thirteen different academic and functional areas were defined: (a) reading or oral or written English; (b) mathematics; (c) other academic; (d) social adaptation; (e) self-help skills; (f) emotional; (g) physical education;

(h) motor skills; (i) speech; (j) visual acuity; (k) hearing; (l) vocational/prevocational; and (m) other.

The distinction between these areas generally is clear. Possible exceptions are the distinction between social adaptation and emotional, and between physical education and motor skills. Generally, the distinction was based on statements within the IEP. That is, if the IEP referred to a goal or objective as a "social adaptation" goal or objective, it was accepted as such. Where such distinctions were not made in the IEP, emotional was interpreted to apply to cases of severe pathology (e.g., "student bites and scratches teacher," or "student often inflicts self-injury"), while social adaptation was interpreted to apply to developmental aspects (e.g., "student doesn't respond to teacher's directions," or "student doesn't get along well with peers"). Physical education was considered to refer to educational considerations such as learning to participate in sports and games, while motor skills were considered to apply to such factors as functional coordination.

I. ACADEMIC AND FUNCTIONAL AREAS IN WHICH ASSESSMENT SERVICES WERE INDICATED IN THE PRESENT LEVEL OF FUNCTIONING SECTION OF IEPs

One of the requirements of an IEP is that it contain information about the student's present level of functioning. Present-level-of-functioning information should document the assessment of the student in terms of both strengths and weaknesses to better contribute to the development of a full program of services for the student.

The general question addressed in this section was: To what extent do IEPs contain information about strengths and weaknesses? To answer this question, each IEP collected in the Basic Survey was examined to determine whether or not it contained some indication of the student's level of functioning in one or more of the thirteen academic or functional areas. While this type of information typically was included under a "present level of functioning" heading, the search for such information was not limited to this type of response. This information also was found under such headings as "comments," "objectives already mastered," "strengths and weaknesses," and "reasons for placement." Statements such as "needs to improve in reading," "doesn't get along well with other children," or "is emotionally mature for his age" were considered as appropriate indications of level of functioning.

Based on the level-of-functioning information contained in the IEP, an indication was made as to whether a strength (normal functioning or above) and/or weakness (deficiency) was indicated in the associated academic or functional area. In cases where supporting data were listed in the IEP, these supporting data were used in making this determination.

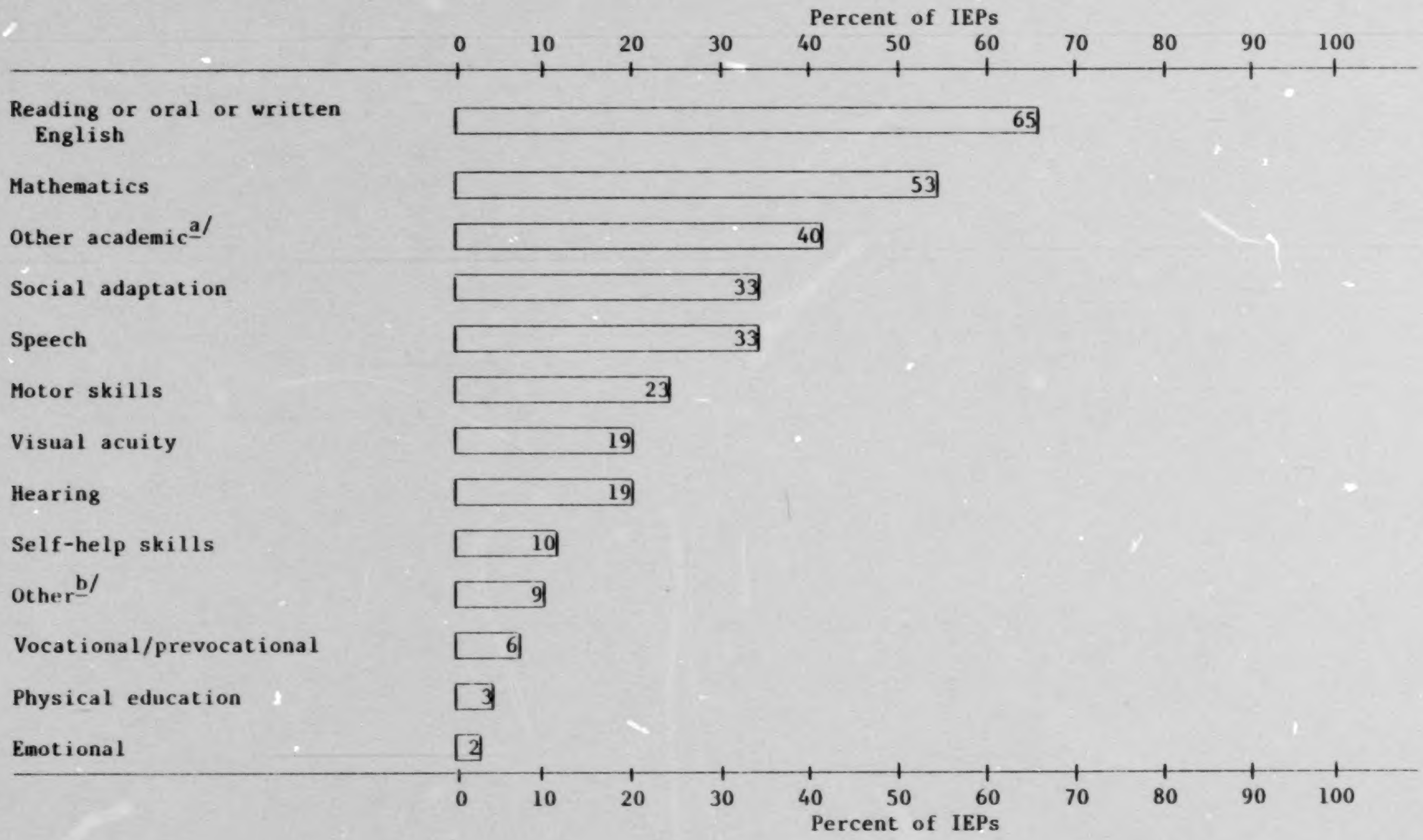
A. Basic Survey Population

Figure 6.1 shows the proportion of IEPs that contained present-level-of-functioning information in the various academic or functional areas. As might be expected, the largest proportions of IEPs provided information in the academic areas of reading/English (65 percent), mathematics (53 percent), and other academic (40 percent). About one-third of the IEPs specified level-of-functioning information in social adaptation and one-third in speech. None of the remaining academic or functional areas had level-of-functioning data specified in more than 25 percent of the IEPs. (See Appendix F, Table F.1.)

The percents of IEPs that indicated a need or a strength in each of the academic/functional areas are shown in Table 6.1. IEPs generally contained more information about needs than about strengths. Only in the area of self-help skills did a significantly larger percent of the IEPs contain statements of strengths. A significantly larger proportion of IEPs contained statements of need in four areas (reading, mathematics, other academic, and speech). (See Table F.1, Appendix F for standard errors.)

The fact that the percents in the "need" column of Table 6.1 do not equal those in Figure 6.1 indicates that need information was not included in 100 percent of the level-of-functioning statements. This finding should not be interpreted as a negative finding since it is reasonable to expect that needs would not be found in all academic or functional areas that were assessed. Also, it is important to note that any given IEP might contain both statements of need and statements of strength in a single functional area. For example, with reading, it may be stated that a student's vocabulary was at a normal level, but he/she needed help in comprehension, thus indicating both strengths and weaknesses.

It is not surprising that needs generally were stated more frequently than strengths, since P.L. 94-142 specifies that the statement of present level of functioning should provide a clear statement of the student's special



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[a] Includes the combined academic areas of science, social science, general academic, and other academic.

[b] Includes such functional areas as general physical health, kinesthetic or perceptual skills.

Figure 6.1. Proportion of IEPs That Contain a Statement of Present Level of Functioning, by Academic and Functional Areas

Table 6.1

PROPORTION OF IEPs THAT INDICATE NEEDS AND STRENGTHS, BY ACADEMIC AND FUNCTIONAL AREAS

Academic or Functional Area	Percent of IEPs with Statement of:	
	Need	Strength
Reading or oral or written English	61	25
Mathematics	48	18
Other academic[a]	31	20
Social adaptation	20	22
Self-help skills	4	7
Emotional	1	1
Physical education	2	2
Motor skills	15	14
Speech	29	10
Visual acuity	11	10
Hearing	12	10
Vocational/prevocational	4	4
Other[c]	5	5

[a] Includes the combined academic areas of science, social science, general academic, and other academic.

[b] Includes such functional areas as general physical health, kinesthetic or perceptual skills.

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educational and related needs.[1] The listing of both strengths and weaknesses is helpful both to those who review the IEPs and to those who carry out the student's program. By taking both strengths and weaknesses into account, goals and objectives can be focused more specifically on areas of need. Also, information about strengths can be used by teachers to determine better strategies by which to work with the student.

B. Variation by Type of School

The extent to which statements of level of functioning appeared on IEPs was examined separately for students in regular and special schools. Significant differences were noted between the IEPs of regular and special school students with respect to the frequency with which level-of-functioning information was found. Such differences were noted in only 7 of the 13 academic/ functional areas; these 7 areas are shown in Table 6.2. Note that in only one of these seven areas (speech) was the larger percent found in regular schools. (See Appendix F, Table F.2 for standard errors.)

There also were significant differences between regular and special schools in 8 of the 13 academic/functional areas relative to the proportion of IEPs that contained an indication of need; i.e., other academic, social adaptation, self-help skills, physical education, motor skills, speech, vocational/ prevocational, and other. Except for the area of speech, needs were stated more frequently in the IEPs prepared for special school students. (See Table F.3, Appendix F for standard errors.)

Also, the IEPs of students in special schools more frequently contained information about strengths. Significant differences between IEPs of regular and special school students were noted in four areas (other academic, self-help skills, motor skills, and vocational/prevocational). In five additional areas (reading, mathematics, social adaptation, physical education, and other), observed differences were large enough to be "suggestive," though they did not meet the criteria for statistical significance. For all areas, information about strengths was found more often in special school IEPs than in the regular school IEPs. (See Table F.4, Appendix F.)

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[1] "Informal Letter to State Directors of Special Education, State Part B Coordinators, and State P.L. 89-313 Coordinators: Policy Paper on Individualized Education Programs (IEPs)." DAS Information Bulletin, Number 64. Washington, D.C.: Bureau of Education for the Handicapped (USOE, HEW), May 23, 1980.

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Table 6.2

DIFFERENCES BETWEEN REGULAR AND SPECIAL SCHOOLS RELATIVE TO INCLUSION OF LEVEL-OF-FUNCTIONING INFORMATION IN IEPs, BY ACADEMIC AND FUNCTIONAL AREA

Academic or Functional Area	Percent IEPs with Information:[a]	
	Regular Schools	Special Schools
1. Other academic[b]	39	50
2. Social adaptation	32	50
3. Self-help skills	9	28
4. Physical education	3	14
5. Motor skills	22	37
6. Speech	34	25
7. Vocational/prevocational	6	18

[a] Percents are based on column estimated totals.

[b] Includes the combined academic areas of science, social science, general academic, or other academic.

In total, these findings show that not only were need statements included in the IEPs of students in both types of schools, but also statements about strengths often were included as well. It should also be noted that the presence of data on strengths in the IEPs is especially significant since the IEP format typically did not require it, and the positive relationship between format and content has been clearly established in Chapter 4.

II. ACADEMIC AND FUNCTIONAL AREAS IN WHICH DATA WERE PROVIDED TO SUPPORT PRESENT-LEVEL-OF-FUNCTIONING STATEMENTS

IEPs in the Basic Survey were examined to determine the extent to which data were provided to support present-level-of-functioning statements. Only objective data (e.g., test scores, documentation of formal observations) were considered to constitute supporting data. Although supporting data are not required by law or regulation, such data can help the user of the IEP to better understand the functioning level of a student and therefore know how to work with the student to increase his/her performance level.

The findings presented in Table 6.3, which were computed from the percents presented in Table F.5 (Appendix F), show that supporting data typically were not included in IEPs.[2] For example, Table F.5 shows that 65.2 percent of all IEPs had a level-of-functioning statement for reading, and 39.9 percent of all IEPs had supporting assessment data for reading, thus 61 percent (39.9 ÷ 65.2) of the IEPs had supporting data in reading, given that they had a level-of-functioning statement in reading.

Using as a base only those academic areas that contained any information about the students present level of functioning, for only two academic areas were supporting data found in more than 60 percent of the IEPs: reading or oral or written English (61 percent) and mathematics (63 percent). The next highest area was speech. Supporting data for 9 of the 14 areas listed in Table 6.3 were found in fewer than 20 percent of the IEPs.

The variation that existed between functional areas in the extent to which supportive data were listed in IEPs was probably due to differences in

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[2] Note that general physical health was separated from the "other" category for purposes of this discussion. Although it is appropriate to discuss the inclusion of supporting data for statements about general physical health, it does not make sense to define general health as a specific functional area for which special services are provided.

Table 6.3

PROPORTION OF IEPs WITH PRESENT-LEVEL-OF-FUNCTIONING STATEMENTS THAT CONTAIN SUPPORTING DATA

Academic or Functional Area With Level-of-Functioning Statement	Percent With Supporting Data[a]
1. Mathematics	63
2. Reading or oral or written English	61
3. Speech	31
4. Other academic[c]	29
5. Hearing	24
6. Visual acuity	19
7. Motor skills	16
8. Other[b]	10
9. Physical education	9
10. Self-help skills	8
11. Vocational/prevocational	8
12. Emotional	5
13. Social adaptation	5
14. General physical health[b]	4

[a] Percents are based on IEPs that contained level-of-functioning information--see Figure 6.1.

[b] For purposes of this table, general physical health was removed as a separate category from the "other" category. About 4.4 percent of the IEPs had a statement of present level of functioning in this area.

[c] Includes the combined areas of science, social science, general academic, and other academic.

the availability of testing instruments. For example, many more standard testing instruments are available in reading and mathematics than in the area of social adaptation, so it is much easier to provide supporting data in reading and mathematics.

These findings can be viewed from another perspective. That is, they show that, while not required, many IEPs contained supporting information about level of functioning in the different academic and functional areas. This is perhaps one indicator of an attempt to comply with the spirit of the law.

III. ACADEMIC AND FUNCTIONAL AREAS IN WHICH EDUCATIONAL PROGRAMMING WAS INDICATED BY AT LEAST ONE GOAL STATEMENT

Since goal statements are indicators of the types of educational programming that a student is expected to receive in a particular academic or functional area, IEPs were examined to determine the extent to which goal statements were listed in the various academic and functional areas. This section reports on the proportion of IEPs that contained at least one goal statement in various academic or functional areas.

A. Basic Survey Population

Figure 6.2 shows the percent of students who received educational programming in various academic and functional areas, as reflected by the existence of at least one goal statement. About 60 percent of the students had educational programming in reading or oral or written English, followed by 43 percent in mathematics, 32 percent in other academics, 28 percent in speech, and 21 percent in social adaptation. No more than 12 percent of the students had programming in any one of the remaining 8 areas. (See row totals of Table F.6, Appendix F.)

B. Variation by Type of School

When IEPs of students enrolled in regular and special schools were compared, significant differences were noted in the percents of students with educational programming in all but two (emotional and visual acuity) of the 13 academic or functional areas. The 11 areas in which differences were noted are listed in Table 6.4. (See Appendix F, Table F.6.)

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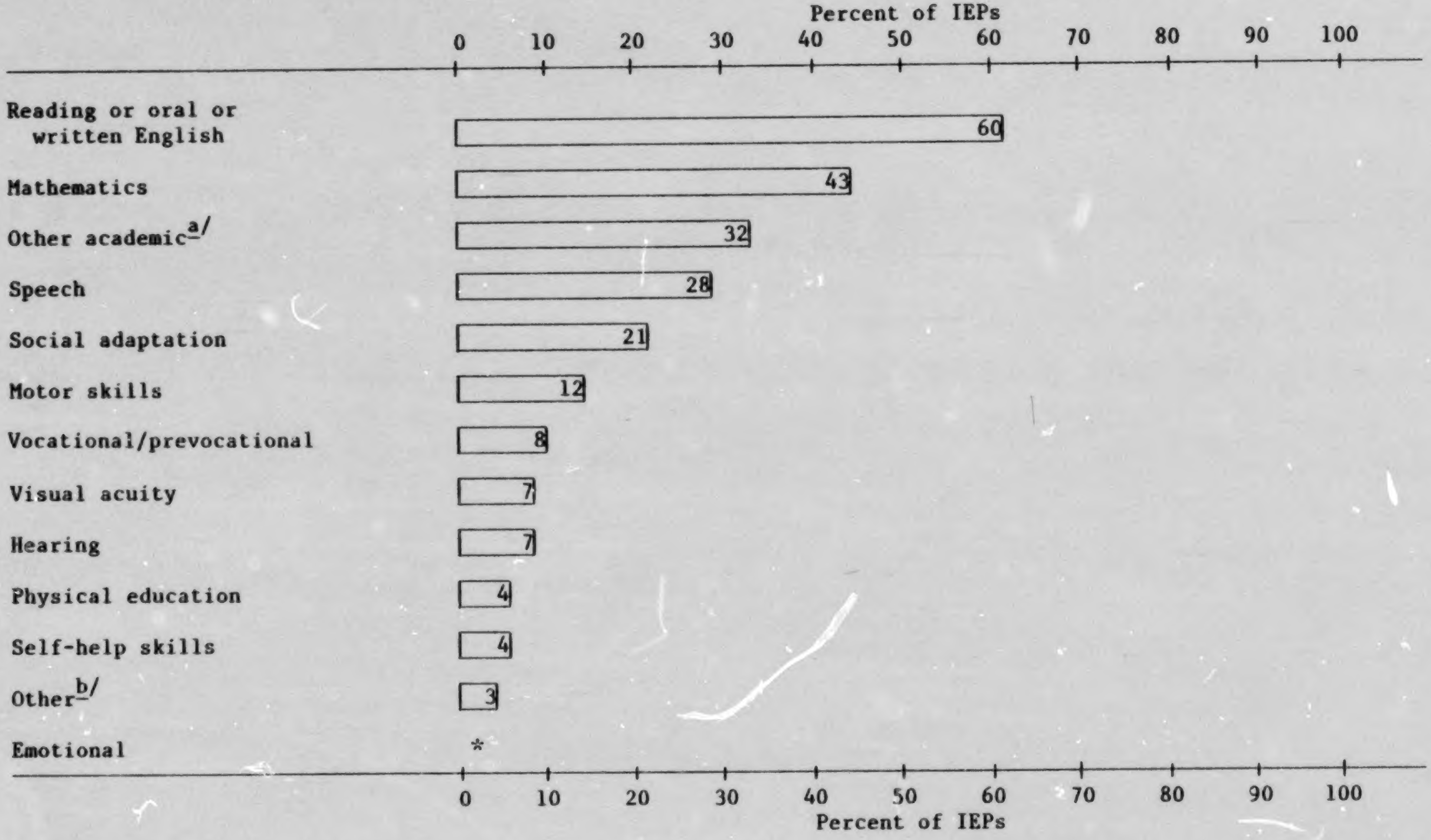

* Percent less than .5.

a/ Includes the combined academic areas of science, social science, general academic, and other academic.

b/ Includes such functional areas as general physical health, kinesthetic or perceptual skills.

Figure 6.2. Percent of IEPs Containing at Least one Goal, by Functional Area.

Table 6.4

IEPs WITH AT LEAST ONE GOAL STATEMENT: A COMPARISON BETWEEN STUDENTS IN REGULAR AND SPECIAL SCHOOLS, BY ACADEMIC AND FUNCTIONAL AREAS

(In percents, based on estimated column totals)

Academic or Functional Area	Regular School Students	Special School Students	Column (3)-Column (2)
1. Social adaptation	20	45	25
2. Self-help skills	3	26	23
3. Motor skills	11	32	21
4. Vocational/prevocational	7	26	19
5. Mathematics	42	58	16
6. Physical education	3	18	15
7. Other academic[a/]	32	44	12
8. Other[b/]	2	14	12
9. Reading or oral or written English	60	69	9
10. Hearing	8	2*	-6
11. Speech	28	20	-8

* Cell has a sample size of less than 25.

[a/] Includes the combined academic areas of science, social science, general academic, and other academic.

[b/] Includes functional areas such as general physical health and kinesthetic or perceptual skills.

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As shown in Table 6.4, a larger percent of regular school students had educational programming in speech and hearing, and a larger percent of special school students had programming in the remaining nine areas.

IV. ACADEMIC AND FUNCTIONAL AREAS IN WHICH EDUCATIONAL PROGRAMMING WAS INDICATED BY AT LEAST ONE SHORT-TERM OBJECTIVE

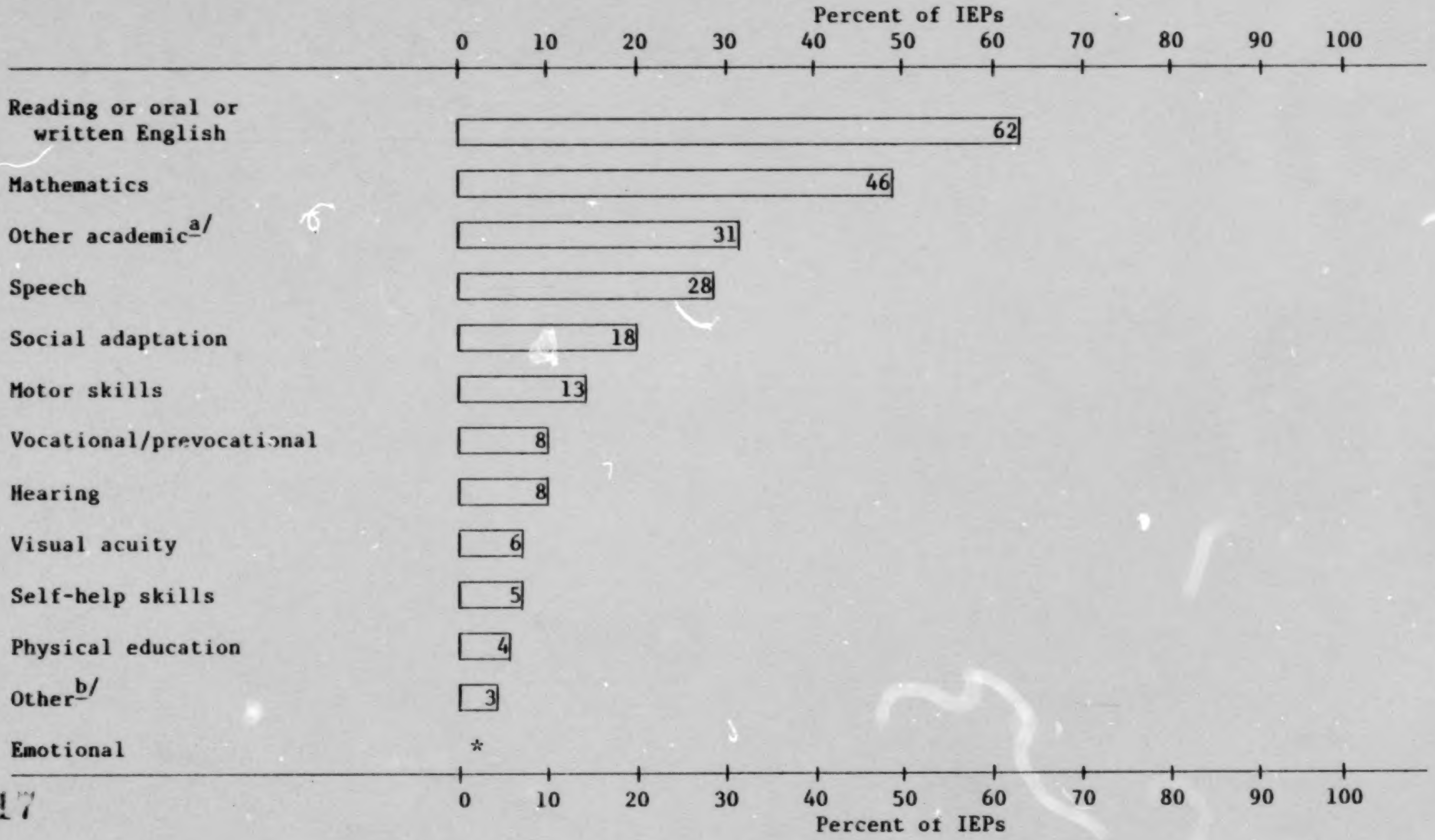
Short-term objectives, like goals, also serve as indicators of the kinds of educational programming a student is to receive. Theoretically, they are more specific than goals, and frequently a series of short-term objectives represents how a goal is to be achieved. IEPs were examined to determine how many of them contained at least one short-term objective in the various academic and functional areas. The IEPs also were examined to determine the average number of objectives per IEP for the different functional areas.

A. Basic Survey Population

Figure 6.3 displays the percents of IEPs which contain at least one short-term objective in the 13 different functional areas. (See row totals of Table F.7, Appendix F.) A comparison of Figures 6.3 and 6.2 shows that the distributions of goals and objectives over functional areas are identical (the very minor differences are probably a result of sampling error). This "good fit" between the two distributions suggests that preparers of IEPs were consistent in specifying at least one objective in those academic or functional areas for which a goal was stated.

Figure 6.3 shows that reading (or oral or written English) was the predominant area in which special education services were provided. Sixty-two percent of the IEPs contained at least one short-term objective in this area. The next highest area was in mathematics, with 46 percent of the IEPs containing at least one short-term objective in this area. The third highest area was "other academic," which includes such general academic areas as science and social science. Thirty-one percent of the IEPs contained short-term objectives in this area.

The least amount of special education service was indicated in the emotional area. Only 0.3 percent of the IEPs contained short-term objectives in this area. (This may be due to the nature of the area. It does not lend itself to short-term objective statements.) The second lowest area was



* Percent less than .5.

a/ Includes the combined academic areas of science, social science, general academic, and other academic.

b/ Includes such functional areas as general physical health, kinesthetic or perceptual skills.

Figure 6.3. Percent of IEPs Containing at Least one Short-Term Objective, by Functional Area.

physical education; only four percent of the IEPs included objectives in this area. Self-help skills and visual acuity were next lowest with five and six percent, respectively.

The other indicators of education programming, the mean numbers of short-term objectives per IEP in the different functional or academic areas for which at least one objective was stated, are presented in Table 6.5. (See Table F.8, Appendix F.) As noted in Table 6.5, each of the 13 academic/functional areas had an average of at least three objectives on the IEPs for which at least one objective was stated. The areas that averaged the most objectives per IEP were reading/English (16.5), mathematics (10.3), and vocational/prevocational (10.0).

B. Variation by Subpopulation

Academic and functional areas in which specific education services were provided (as indicated by the specification of at least one objective) were examined by both the age of handicapped students and the type of school in which they were enrolled. Comparisons of the average number of objectives were not made.

1. Age Levels

Comparisons of the percent of IEPs that had at least one short-term objective in various academic or functional areas are presented in Table 6.6. (See Table F.9, Appendix F for standard errors.) The findings in Table 6.6 show certain differences across age groupings in expected directions. For example, the percent of IEPs with at least one objective in reading was only 36 percent for the 3-5-year-old group. It was 59 percent for the 6-12 year olds, 73 percent for the 13-15 year olds, and 70 percent for the 16-21-year-old group. Handicapped children who were in the 3-5-year-old group were less likely to receive instruction in the area of reading than were older handicapped students. This same trend was true for mathematics and the vocational/prevocational area.

On the other hand, the 3-5-year age group were more likely to receive other kinds of services. For example, 59 percent of the IEPs for the 3-5-year-old group had at least one objective in the area of speech. The corresponding percents for the 6-12 year olds, the 13-15 year olds, and the 16-21 year olds were 36 percent, 10 percent, and 10 percent, respectively, indicating that the recognized need for services in speech declined as children got

Table 6.5

AVERAGE NUMBER OF OBJECTIVES PER IEP, BY ACADEMIC AND FUNCTIONAL AREAS

Academic or Functional Area	Mean Number Of Objectives[a]
1. Reading or oral or written English	16.54
2. Mathematics	10.25
3. Vocational/prevocational	10.01
4. Speech	8.40
5. Other academic[b]	7.45
6. Self-help skills	7.28
7. Motor skills	6.75
8. Other[c]	5.98
9. Visual acuity	5.35
10. Physical education	5.33
11. Social adaptation	5.08
12. Hearing	3.83
13. Emotional	3.52*

* Cell has a sample size of less than 25.

[a] Mean for each area is based on those IEPs that have at least one objective for the area.

[b] Includes the combined academic areas of science, social science, general academic, and other academic.

[c] Includes functional areas such as general physical health and kinesthetic or perceptual skills.

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Table 6.6

IEPs WITH AT LEAST ONE OBJECTIVE: A COMPARISON BETWEEN STUDENT AGE LEVELS, BY ACADEMIC AND FUNCTIONAL AREAS

Academic or Functional Area	Percent IEPs by Age Levels[a]			
	3-5	6-12	13-15	16-21
1. Reading or oral or written English	36	59	73	70
2. Mathematics	28*	40	62	53
3. Other academic[b]	28*	24	42	48
4. Social adaptation	25*	15	23	23
5. Self-help skills	13*	3	6	10
6. Emotional	(d)*	(d)*	(d)*	(d)*
7. Physical education	6*	2*	6	8
8. Motor skills	38	14	11	7
9. Speech	60	36	10	10
10. Visual acuity	10*	7	5	4*
11. Hearing	10*	10	6	4*
12. Vocational/prevocational	(d)	3	10	31
13. Other[c]	(d)	3	2*	5

* Cell has a sample size less than 25.

[a] Includes the combined academic areas of science, social science, general academic, and other academic.

[b] Includes the combined academic areas of science, social science, general academic, and other academic.

[c] Includes functional areas such as general physical health and kinesthetic or perceptual skills.

[d] Percents are less than .5.

older. A similar trend was observed for motor skills, in that 38 percent of IEPs for the 3-5-year-old group contained at least one objective in motor skills, as compared to only 14 percent for those 6-12 years old, 11 percent for those 13-15 years old, and 7 percent for the 16-21-year-old group. Again, this is an expected trend, showing that special assistance in motor skills was provided with much greater frequency to the youngest age group, with marked decline with increase in age of handicapped students.

2. Regular and Special Schools

Significant differences were noted between the IEPs of regular and special school students in all but 4 of the 13 academic or functional areas in which objectives were specified; i.e., reading, emotional, speech, and visual acuity (though not significant, the difference in the speech area was large enough to be suggestive of a true difference).

For eight of the nine areas in which significant differences were noted, students in special schools had the higher proportion of IEPs containing at least one short-term objective per functional area. (The single exception was in the area of hearing, where eight percent of the regular school IEPs had at least one objective as compared to four percent of the special school IEPs.) Thirty-seven percent of special school IEPs had objectives in social adaptation, as compared to 17 percent of the IEPs from regular schools. Similarly, 19 percent of the special school IEPs contained objectives in physical education, compared to 3 percent of those from regular schools. This same relationship existed for motor skills, self-help skills, and the vocational/prevocational area. (See Table F.7, Appendix F.)

If it can be assumed that students placed in special schools need more special educational services, then the survey demonstrates that they are receiving them in most functional areas.

V. RELATED SERVICES

This section presents the results of the survey as they relate to the provision of related services to handicapped students. For purposes of this discussion, related services include audiology, counseling, medical services, occupational therapy, parent counseling and training, physical therapy, psychological services, recreation, social work services, transportation, and other.

A. Basic Survey Population

Thirteen percent of the IEPs indicated one or more services, and ten percent listed just one related service. Two percent of the IEPs specified two related services, a little less than one percent indicated a need for three related services, and four or more related services were noted only in 0.2 percent of the IEPs. (See row totals in Table F.10, Appendix F.)

The most frequently listed related service was transportation, with six percent of all IEPs listing this service. The next highest was medical services (e.g., eye exams, physical exams, medication, and nursing care), which was indicated on four percent of the IEPs. Another four percent of IEPs listed other related services, e.g., tutoring, dental services, and vocational rehabilitation services. Counseling was indicated in two percent of the IEPs, while occupational therapy and psychological services each were noted on one percent of the IEPs. (These percents total more than 13 percent, the percent of students with IEPs that specified related services, because multiple services were specified on some IEPs; see row totals of Table F.10, Appendix F.)

B. Variation by Subpopulation

A significantly larger percent of the IEPs for special school students specified the provision of one or more related services than did the IEPs of students in regular schools (23 percent versus 12 percent). Not surprisingly, more of the special school IEPs specified more than one related service. (See Table F.10, Appendix F.)

The above differences between regular and special schools can be accounted for by the types of services offered. Special schools more often specified transportation as a related service than did regular schools (14 percent versus 5 percent). In both types of settings, however, transportation was the related service most often specified. Significant differences also were noted for two other related services--occupational therapy and physical therapy. Each of these services was indicated in about four percent of the IEPs of special school students, as compared to about one percent each for regular school students. (See Table F.11, Appendix F, for complete results; note that small sample sizes resulted in relatively large standard errors for some of the measures.)

VI. SUMMARY

The types of special education and related services that were contained in IEPs were examined in this chapter. Special education services were defined to include both assessment and educational programming. Assessment services were indicated through statements about level of functioning, including both strengths and weaknesses. Educational programming was indicated through goals and short-term objectives. Thirteen academic and functional areas were defined for the purpose of describing these services.

The largest proportion of IEPs contained information about present level of functioning in academic areas--65 percent of IEPs contained statements about students' ability in reading or oral or written English, 53 percent in mathematics, and 40 percent in other academic. Social adaptation and speech were next, with about one-third of all IEPs containing information about present level of functioning in each of these areas. Each of the other eight academic/functional areas had level-of-functioning information indicated on some proportion of the IEPs, but in no area was such information found on more than 25 percent of the documents. A larger proportion of IEPs for students in special schools contained level-of-functioning information in six of the seven academic/functional areas for which there were significant differences between regular and special schools.

Statements about functioning level were analyzed to determine the extent to which they included statements about need and statements about strengths. While need statements appeared with greater frequency in most of the functional areas, strengths were listed with considerable frequency. In general, the IEPs of students in special schools more frequently contained statements about both needs and strengths.

The extent to which IEPs contained supporting data for statements about present level of functioning also was explored. Supporting data for each of the areas of reading/English and mathematics were found in about 60 percent of the IEPs that contained present-level-of-functioning statements. The next highest area was that of speech (slightly less than one-third of the IEPs that had statements about the student's present level of functioning also had supporting data). Fewer than 20 percent of the IEPs with level-of-functioning statements in 9 of the other 11 functional areas contained supporting data.

When goal statements were used as indicators that special education services would be provided, the results were similar to those found in present-level-of-functioning data. The largest proportion of IEPs (60 percent) contained at least one goal in the area of reading/English. Next was mathematics, with 43 percent, followed by other academic (32 percent) and speech (28 percent). In none of the remaining seven areas did more than 12 percent of the IEPs contain a goal statement. When comparisons were made between the IEPs of students in regular and special schools, larger percents of the regular school IEPs had goal statements in speech and hearing; larger percents of special school IEPs had goal statements in the other nine areas for which significant differences were noted.

Short-term objectives, like goals, also were considered as indicators of special education programming. The pattern of short-term objectives contained in IEPs for the different academic and functional areas was basically identical to that for goals. Variation by school type with respect to the percent of IEPs with at least one short-term objective per functional area was similar to that for goals. Two trends were noted for age levels: (a) an upward trend in the academic areas, i.e., greater percents of IEPs of older students had at least one objective listed in academic areas; and (b) a downward trend in the functional areas of motor skills and speech, i.e., the higher the age level, the lower the percent of IEPs with at least one objective in those areas.

The average number of objectives per IEP for the different academic and functional areas also was examined. Reading, mathematics, and vocational/prevocational were the areas that had the highest average number of objectives. Reading had an average of 16.5 objectives; mathematics and vocational/prevocational had an average of about 10 objectives each. The average number of objectives for the remaining areas ranged from 3.5 to 8.4.

Only 13 percent of the IEPs indicated the provision of related services. Ten percent of the IEPs indicated one related service, two percent indicated two related services, and about one percent indicated three or more related services. The most frequently listed related service was transportation (six percent). The next highest was medical services (four percent).

A comparison between regular and special schools showed that related services were more frequently noted on IEPs developed in special schools. Also, multiple related services were specified more on the IEPs of special school students. These findings were in expected directions.

Chapter 7

How Informative and Internally Consistent Are IEPs?

Since extensive data already have been presented in Chapter 4 regarding the extent to which both mandated and nonmandated information are contained in IEPs, the reader is referred to that chapter for a detailed discussion of the informativeness of IEPs. While informativeness of IEPs is discussed in this present chapter, the primary focus is on internal consistency.

Section I of this chapter discusses the internal consistency of IEPs as determined by the relationship between statements of need, goals, and objectives. Section II references an exploratory study which was undertaken to categorize IEPs by degree of informativeness and internal consistency. Section III presents a brief summary of the findings discussed in the chapter.

I. RELATIONSHIP BETWEEN STATEMENTS OF NEED, GOALS, AND OBJECTIVES

Educational programming, which was specified primarily through the goal statements and short-term objectives listed in the IEPs, should be based on the student's present level of functioning. (As reported in Chapter 3 of Volume IV, Level 2 of the Retrospective Longitudinal Substudy provided strong evidence that the IEP was a good indicator of the services actually received by students.) Thus, the relationship between need statements, goals, and short-term objectives provides an indication of the student's special education needs and what is being done about them through educational programming. A clear statement of need related to a goal, and goals that are in turn related to a group of short-term objectives, provides a reasonable guide to a student's IEP. An IEP which includes these three key types of statements likely communicates the student's needs and planned services to all parties involved in the provision of services to the student. Also, the relationship between these three key types of statements is an excellent indicator of the internal consistency of the IEP.

There should be a consistent relationship between need statements, goals, and objectives. That is, if a need is stated, the IEP also should contain at least one related goal and at least one objective indicating how that goal is to be achieved. Alternatively, each stated goal should be accompanied by need statements and objectives. The same principle applies to short-term objectives. Ten of the 13 academic and functional areas (see Chapter 6) were selected for study. The "other academic" and the "other" areas were excluded because their imprecise definition precluded linking needs, goals, and objectives to specific academic areas; e.g., a linking of needs, goals, and objectives to the "other academic" area could be misleading since the need might be in science while the goals or objectives might apply to social studies. The emotional area was excluded because the number of IEPs containing needs, goals, and/or objectives in that area was so small that findings could be spurious.

Given that an IEP had a need, a goal, or an objective in an academic or functional area, the percent of IEPs with each of the seven possible combinations of these three items was computed. The seven combinations are: (a) a need, a goal, and an objective; (b) only a need and a goal; (c) only a need and an objective; (d) only a need; (e) only a goal and an objective; (f) only a goal; and (g) only an objective.

Table 7.1 lists the selected academic/functional areas and displays the percentages of IEPs containing various combinations of need statements, goals, and objectives. The percentages for each functional or academic area listed in this table are based on the total number of IEPs that contained either a need statement, a goal, an objective, or some combination thereof, for the area. (See Table G.1, Appendix G.)

Good special education practice would be represented in this table if all figures in the extreme left column, labeled "Needs, Goals, and Objectives," were 100 percent. However, the highest percent in this column is only 61 percent, the percent of IEPs that contained statements of needs, goals, and objectives in the area of reading or oral or written English. Only two other areas were internally consistent (or complete) in about 50 percent of the IEPs for which they were applicable--speech (52 percent) and mathematics (48 percent). The lowest percent was in physical education (9 percent).

The next column to the right (Needs and Goals Only) shows the percent of IEPs that contained statements of need and goals, but did not contain objectives. This combination occurred most frequently in social adaptation (10 percent).

The third column in Table 7.1 (Needs and Objectives Only) presents the proportion of IEPs in each functional area that contained statements of need

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Table 7.1

PERCENT OF IEPs CONTAINING VARIOUS COMBINATIONS OF NEED STATEMENTS, GOALS, AND OBJECTIVES IN SELECTED FUNCTIONAL AREAS

Academic or Functional Area	Combinations[a/]							Total
	Needs, Goals, and Objectives	Needs and Goals Only	Needs and Objectives Only	Needs Only	Goals and Objectives Only	Goals Only	Objectives Only	
Reading or Oral or written English	61	7	7	8	12	2	4	100[b/]
Mathematics	48	7	8	15	14	2	5	100[b/]
Social adaptation	22	10	4	24	20	11	8	100[b/]
Self-help skills	17	2*	5*	28	15	16	17	100
Physical education	9*	7*	3*	7*	22	26	26	100
Motor skills	22	8	8	29	17	5	11	100
Speech	52	8	7	12	12	3	6	100
Visual acuity	17	7	4*	45	12	8	8	100[b/]
Hearing	17	8*	7	37	9	8	13	100[b/]
Vocational/ prevocational	14	3*	2*	14	39	15	14	100[b/]

* Cell has an estimated sample size less than 25.

[a/] Percents for each academic/functional area are based on the number of IEPs with at least one of the three information items in that area (i.e., a need, goal, or objective).

[b/] Detail does not add to total because of rounding.

and short-term objectives, but no goals. The percents shown in this column are low, i.e., less than 10 percent.

The findings presented in the fourth column (Needs Only) reflect the percents of IEPs that contained only need statements. The percent of IEPs that contained need statements, but no goals or objectives, is rather high in most of the functional areas. Twenty-eight percent of the IEPs contained need statements only, for self-help skills; 24 percent of the EPs contained need statements only, in social adaptation, as did 29 percent in motor skills. The percents for vision and hearing were 45 percent and 37 percent respectively; however, these latter two functional areas may operate somewhat differently than the other areas. While vision and hearing deficits may be indcated on IEPs, it may not always be appropriate to link educational goals and objectives to the deficit. Including a statement about the deficit provides information indicating that special arrangements may be in order, but may not show up as goals and objectives in vision or hearing. Rather, they may show up in an academic area, like speech, or for that matter, in any area wherein the student needs special help as a result of the deficit.

The remaining three columns in Table 7.1 present findings pertinent to academic and functional areas for which IEPs contained goals and/or objectives without an indication of need. These results show that the pattern of not linking goals and objectives generally holds in those IEPs that did not contain information denoting a need or weakness. The "best" case for this group is to have both a goal and objective in the same area. This best case occurred most often in the area of vocational/prevocational where 39 percent of the IEPs that had at least one need, goal, or objective in this area had a goal(s) and objective(s), but no indication of need. Note also that, in this area 15 percent of the IEPs had goals only and 14 percent had objectives only.

The frequency with which IEPs were found to lack internal consistency between needs statements, goals, and objectives was unexpected. As stated in a recent BEH Policy Paper on IEPs:

> There should be a direct, identifiable link between the present levels of educational performance and other components of the IEP. Thus, if the statement describes a problem with the child's reading level and points to a deficiency in a specific reading skill, these problems should be addressed under both (a) goals and objectives,

> and (b) specific special education and related services to be provided to the child.[1]

However, on the positive side 71 percent (with a standard error of 2.5) of the IEPs included at least one incident of a goal statement that related to a short-term objective that related to an area of indicated need. Given that only 90 percent of the IEPs included any statement of present level of performance (see Chapter 4), almost 80 percent of the IEPs that contained present-level-of-performance information were informative and internally consistent to the extent that for at least one of the areas of indicated need, both an annual goal and a short-term objective were included.

II. ADDITIONAL INFORMATION RELATED TO THE INFORMATIVENESS AND INTERNAL CONSISTENCY OF IEPs

While other chapters in this volume present findings regarding discrete portions of IEPs and discrete factors regarding IEPs, no particular attempt has been made to provide a global view of the documents. In an attempt to provide such a view, an exploratory investigation was conducted to categorize IEPs according to the degree of informativeness and internal consistency. The methodology and findings of this investigation are presented in detail in Appendix G. The investigation findings strongly support the findings reported in Section I above.

III. SUMMARY

The relationship between statements of need, goals, and objectives was studied for 10 of the 13 academic and functional areas. It was found that many IEPs lacked informativeness and internal consistency in that the need statements they contained were not accompanied by associated goal statements and short-term objectives. Although about 71 percent of the IEPs included at least one incident of a goal statement that related to a short-term objective that related to an area of indicated need, many IEPs did not have goal statements and objectives specified for identified needs in specific academic and functional areas. The academic area of reading/English most often contained all three statements; i.e., about 61 percent of the IEPs that had one of the information items in this area had all three. Speech and mathematics were the only other two areas that were complete and internally consistent in about one-half of the IEPs for which they were applicable. No one of the other six areas was "complete" in more than about 25 percent of the applicable IEPs.

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[1] "Informal Letter to State Directors of Special Education, State Part B Coordinators, and State P.L. 89-313 Coordinators: Policy Paper on Individualized Education Programs (IEPs)." DAS Information Bulletin, Number 64. Washington, D.C.: Bureau of Education for the Handicapped (USOE, HEW), May 23, 1980.

In several academic and functional areas, relatively large percentages of IEPs contained need statements without related goals or objectives . These percents, which ranged over academic/functional areas from a low of 10 to a high of 45, were mostly in the 15-30 range. Also, many IEPs contained goal statements without related statements of need and/or objectives, and many contained objectives without one or both of the other two components. IEPs that contained needs only, or goals only, or objectives only, must be considered to be lacking in informativeness and internal consistency.

Chapter 8

In What Service Settings, and for What Proportion of the Academic Week, Do Handicapped Students Receive Special Education Services?

This chapter provides information regarding the types of settings in which special education services were provided to handicapped students. It also provides information about the average number of hours per week handicapped students spent in various settings. As such, it focuses on Basic Survey Question VII: In what service settings, and for what proportion of the academic week, do students receive the special educational services specified in IEPs?

Educational settings were grouped as follows: (a) within school and out-of-school settings, including regular classroom, resource room, self-contained classroom, and homebound or hospital programs; and (b) settings, other than the student's primary school, attended on a pullout basis. (The proportion of students served through intermediate districts or cooperative service arrangements with other districts was discussed in Chapter 2, Section III.C.) The type of setting also was contrasted with selected student, school, and district characteristics.

Findings regarding the above are presented in three sections. Section I discusses the proportion of students served in the first group of settings (within school and out-of-school settings). Section II focuses on the time (number of hours per week) that students were served in this group of settings; and Section III discusses the proportion of students served at other schools on a pullout basis. Since students enrolled in special education schools are, by definition, served in a special setting, these students are not included in the discussion of within-school and out-of-school programs. They are, however, included in Section III, where pullout services are discussed. A summary of major findings is presented in Section IV. Detailed descriptive statistics and associated standard errors for the results presented in this chapter are included in Appendix H.

Information about student placement in particular educational settings was obtained from teachers most knowledgeable about the students' special education programs. It should be cautioned, however, that there appears to be a major discrepancy between data collected from the teachers most knowledgeable about the student's special education programs and data collected from IEPs regarding special education in the regular classroom. Data from the teachers indicated that about one-fourth of the handicapped students received at least a portion of their special education in the regular classroom. However, only 1.3 percent (with a standard error of 0.3) of the IEPs included annual goals or short-term objectives intended to be met in the regular classroom. Two possibilities exist for this discrepancy. First, a student may have received special education in the regular classroom, but this portion of the student's special education program was not included in the IEP. Second, and more likely, many teachers, when providing pertinent data by completing the Student Characteristics Questionnaire, did not clearly distinguish between special education and regular education. Since it often is by no means clear when "special" education ends and "regular" education begins, many of the teachers entered information in the Student Characteristics Questionnaire which indicated that whatever portion of the week was left beyond the time spent in a special setting was spent in the regular classroom receiving special education. It is most likely that in the majority of such cases the teacher intended merely to indicate that the student spent the balance of the week in the regular classroom, not that special education was provided there.[1]

While this probable error is unfortunate, it still leaves valid the information presented regarding the special education placements and amount of time spent in special education settings such as resource rooms, self-contained special education classes, and miscellaneous settings other than the regular classroom; however, it is possible that some students in each of these settings might also have received some special education in the regular classroom. For example, a placement setting entitled "resource room only" really means "resource room and possibly regular classroom." As discussed in the next paragraph, there is evidence that a very small percentage of students received special education in the regular classroom in addition to receiving it in one of the other settings. As a result, a placement setting with a title that indicates receipt of special education services only in that setting (except for the "regular classroom only" setting) may not be precisely correct.

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[1] The major finding of the Level 2 Substudy, discussed in Volume IV, was that there was a high level of agreement between the special education programs documented in IEPs and the special education actually provided to handicapped students. However, the data discrepancy referred to above did not occur with the Level 1 Substudy subsample. Only one of the 61 students (1.6 percent) in that subsample was reported to be receiving special education in the regular classroom. There are several possible reasons for the absence of the discrepancy in that subsample. First, the Level 1 Substudy data collection was accomplished by senior-level personnel knowledgeable in the area of special education. These personnel were more likely to question the teachers regarding any apparently contradictory data inputs. Second, these personnel spent considerably more time (up to three days) in each school district in the subsample. Thus, they were able to work more closely with the teachers who provided the "setting" information. And third, because of the small sample size, teachers could be (and, in several cases, were) recontacted to clarify any unclear or apparently contradictory inputs.

The two additional pertinent facts that are not precisely known are: (a) the exact amount of time spent in special education in the regular classroom and (b) the exact amount of time spent in the regular classroom regardless of the type of education (special or regular) provided. However, reasonable estimates of both of the above are available. As noted previously, only 1.3 percent of the IEPs included goals or objectives to be met in the regular classroom. This is a strong indicator that only about 1.3 percent of the students received any special education in the regular classroom. The amount of time assigned to the regular classroom is estimated in Section II of this chapter based on subtracting the amount of time assigned to special settings from the amount of time typically spent in school. The balance should represent the approximate amount of time assigned to the regular classroom.

I. PROPORTION OF STUDENTS SERVED IN VARIOUS EDUCATIONAL SETTINGS

This section includes information about the proportion of students who received special education services in different types of within-school and out-of-school settings. Data regarding the basic survey population will be presented first, followed by variation by selected subpopulations.

A. Basic Survey Population (Regular Schools Only)

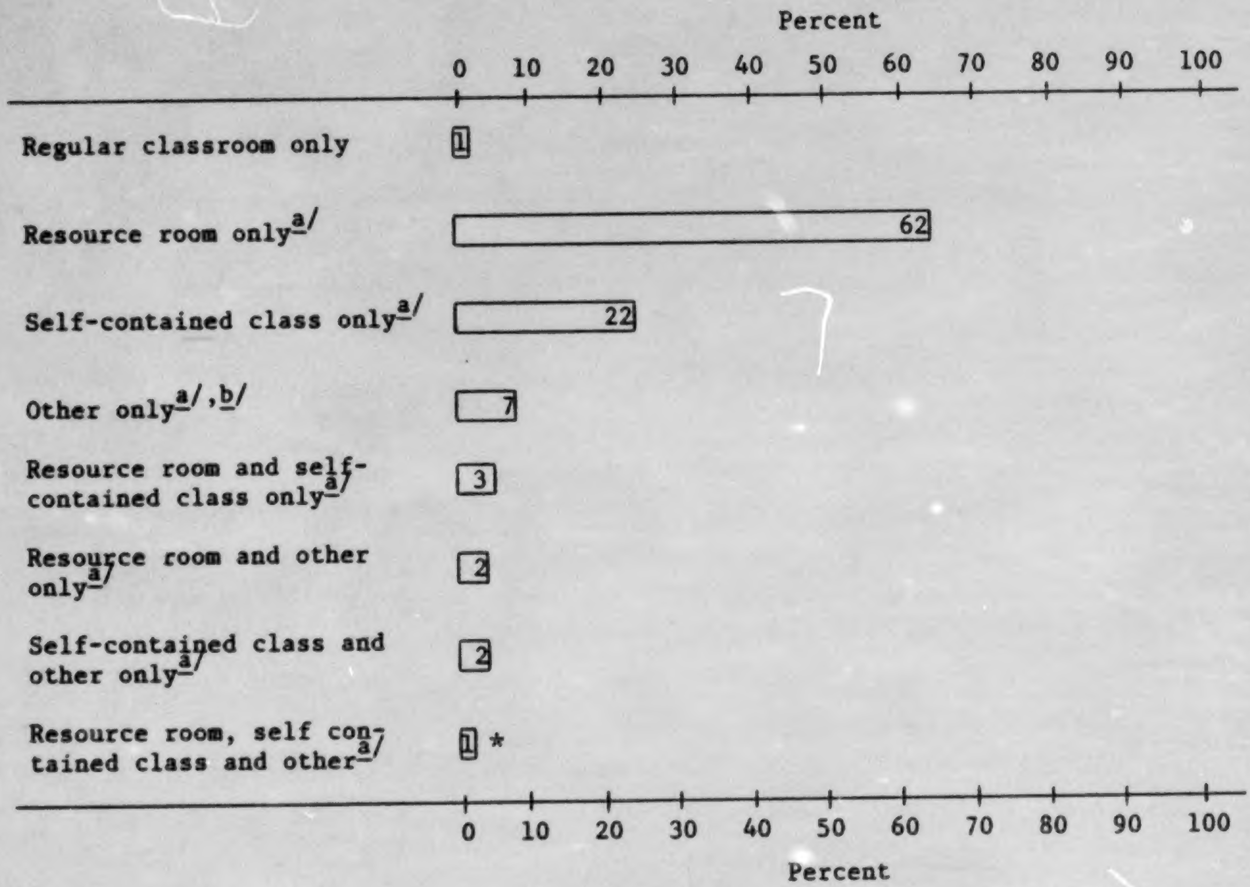
The basic survey population consisted of those handicapped students who either were attending regular schools or were placed in special schools; as was noted above, the data about students in special education schools was not included in this analysis. The types of educational settings found to be in use for handicapped students enrolled in regular schools were the resource room, the self-contained classroom, the regular classroom, and others (e.g., hospital or homebound programs, work study programs, vocational/prevocational skill centers, special physical education). Students also were found to be placed in various combinations of these settings.

Figure 8.1 displays the percent of handicapped students attending regular schools who received special education services in the four educational settings or various combinations of them. (Also see Table H.1.) One percent of the students in the basic survey population received all their special education services in the regular classroom only. The self-contained classroom was the exclusive special education placement option for 22 percent of the students. Sixty-two percent of the students received all their special education services in a resource room only. Seven percent of the students received special education services exclusively in a miscellaneous setting such as a hospital or homebound program, a work study program, a vocational/prevocational skills center, or special physical education. The remaining eight percent of the students received special education services in some combination of the following settings: resource room, self-contained class, regular class, and other. These combinations are grouped as a single category in the balance of the analyses.

As is noted in Figure 8.1, and as was discussed previously, combinations that purportedly included the regular classroom are not presented separately since the validity of these data is suspect. Also, as discussed above, it is possible that a small percent of the students who are indicated as receiving special education services in the "resource room only," "self-contained class only," or "other only" might also have received such services in the regular classroom.

The information provided by Figure 8.1 is instructive. The fact that only one percent of handicapped students were receiving all of their educational program in the regular classroom raises serious questions regarding the extent to which all handicapped children were being educated in the least restrictive setting. This finding is consistent with a finding cited in the introduction to this chapter that 99 percent of all IEPs contained no goals or objectives to be carried out in the regular classroom.

On the other hand, the fact that 62 percent of the students received special education services in a resource room only while only 22 percent received such services exclusively in a self-contained classroom indicates a



* Cell has estimated sample size of less than 25.

a/ The regular classroom may or may not have been included.

b/ "Other" settings include hospital or homebound programs, work study programs, vocational/prevocational skills centers, special physical education.

Figure 8.1. Percent of Handicapped Students Receiving Special Education Services, by Type of Setting (Regular, Self-Contained, Resource, and "Other" Settings, or Some Combination).

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positive shift away from the self-contained class as the exclusive or even primary placement option.

B. Variation by Subpopulation

The type of educational setting was examined for various subpopulations, including the four different age groups, level of severity of handicap, type of handicapping condition, and school district per-pupil expenditure.

1. Variation by Age

Figure 8.2 exhibits a comparison between age groups of the percent of handicapped students receiving special education services in different settings.

Forty percent of the 3-5 year old group received special education services in resource rooms only, while 67 percent of the 6-12 year olds, 55 percent of the 13-15 year olds, and 49 percent of the 16-21 year age group were assigned to this setting. Except for the difference between the 3-5 and 6-12 year olds, these proportions are not sufficiently different to be considered statistically significant.

There were no significant differences between the groups with regard to the receipt of special education in the other settings. (Also see Table H.1.)

2. Variation by Level of Severity

A comparison of the percent of students receiving special education services in different educational settings, by severity level of students' handicap(s), is presented in Figure 8.3.[2] (See Table H.2 for complete statistics.) There were no differences between the three groups with regard to the percent of students who received special education services in the regular classroom.

Sixty-two percent of those students classified as mildly handicapped received all of their special education services in a resource room. The percentages for students with moderate and severe handicaps were 65 and 51 percent, respectively. The difference between these latter two groups is statisticaly significant.

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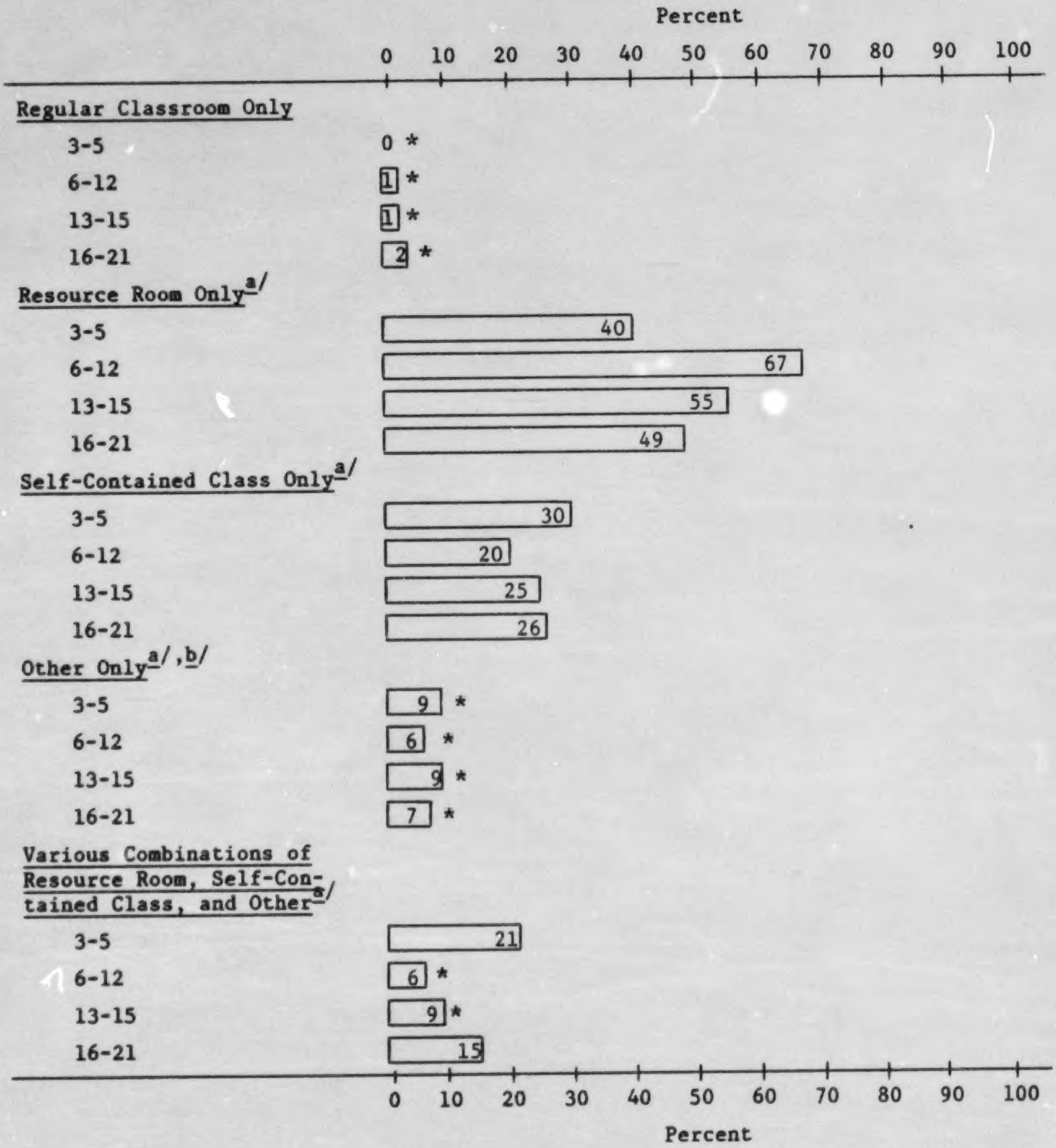
[2] Data regarding the nature and level of severity of each student's handicap were obtained directly from the teacher most knowledgeable about the student's IEP. These teachers were asked to identify the nature of the student's handicap and to indicate whether the handicap was mild, moderate, or severe. As such, these data are highly subjective and might be based on each teacher's own frame of reference, particularly with regard to severity level.

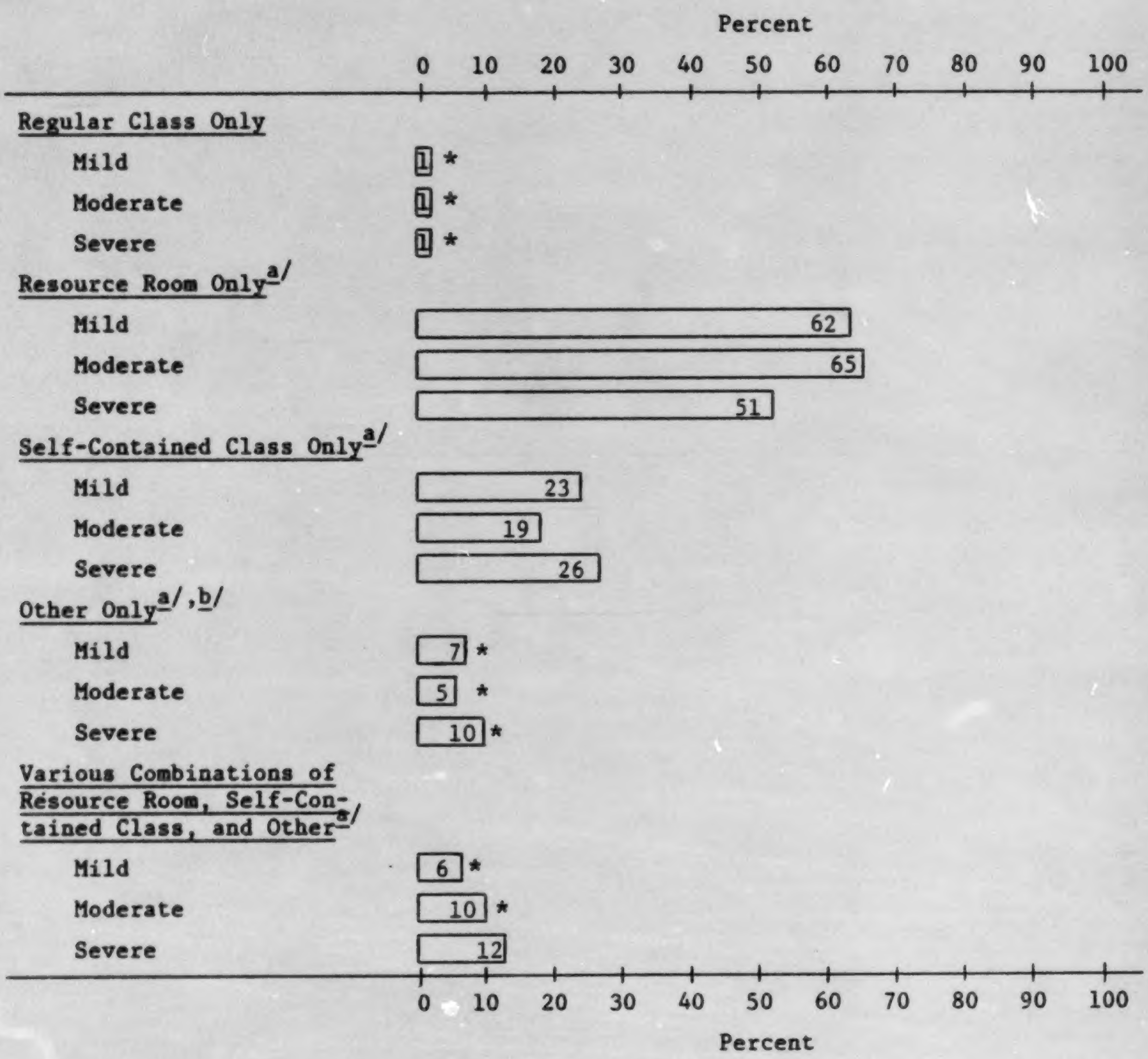


* Cell has estimated sample size of less than 25.

a/ The regular classroom may or may not have been included.

b/ "Other" settings include hospital or homebound programs, work study programs, vocational/prevocational skills centers, special physical education.

Figure 8.2. Percent of Handicapped Students Receiving Special Education Services in Different Settings, by Age Groups.



* Cell has an estimated sample size of less than 25.

a/ The regular classroom may or may not have been included.

b/ "Other" settings include hospital or homebound programs, work study programs, vocational/prevocational skills centers, special physical education.

Figure 8.3. Percent of Handicapped Students Receiving Special Education Services in Different Settings, by Level of Severity.

There were no significant differences between the three groups with regard to receiving all of their special education services in self-contained classrooms. These findings are somewhat surprising in that one would expect a relatively lower proportion (as compared to the proportion of moderately and severely handicapped) of mildly handicapped students in self-contained classrooms and a relatively higher proportion in resource rooms.

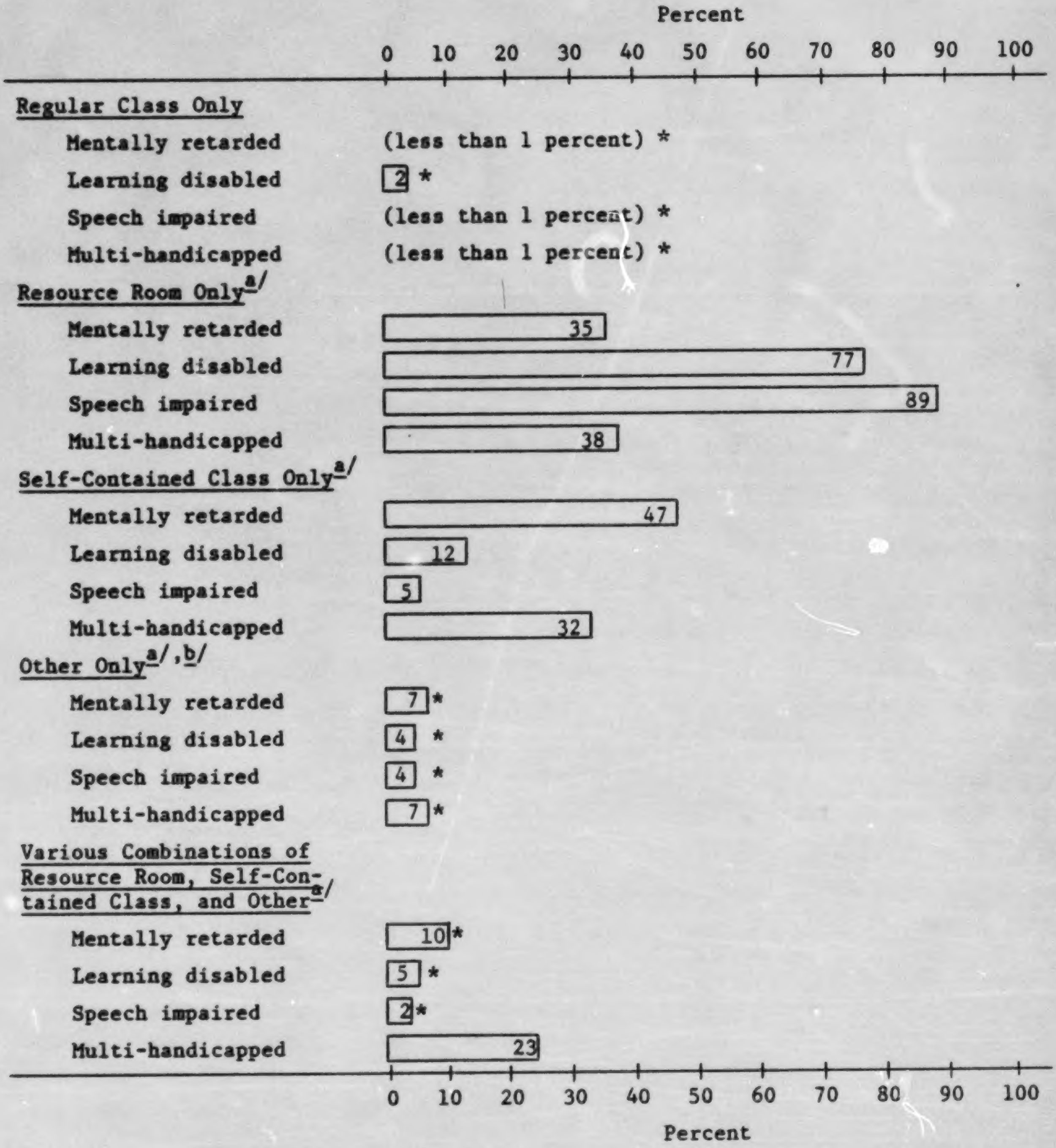
3. Variation by Handicapping Condition

Figure 8.4 shows a comparison of the percent of students who received special education services in different educational settings by four selected handicapping conditions: mental retardation, learning disabled, speech impaired, and multi-handicapped. These conditions were selected because they occurred with high frequency. (See Table H.3 for complete statistics.) As indicated in Figure 8.4, a very small percent of these students received special education services exclusively in regular classrooms.

For those receiving special education services in resource rooms only, the proportions were quite different. Thirty-five percent of those with mental retardation, 77 percent of those with learning disabilities, 89 percent of those with speech problems, and 38 percent of the multi-handicapped received their special education services in this setting only. Although differences between the mentally retarded and multi-handicapped groups are not significant, the other comparisons between the four groups are statistically significant.

The findings for self-contained classrooms only by handicapping condition were that 47 percent of the students who were mentally retarded received special education services in this setting; as did 12 percent of the learning disabled students and 5 percent of those needing speech therapy. About one-third (32 percent) of the multi-handicapped students were served in self-contained classrooms only. Differences between these groups are statistically significant.

No significant differences were noted in placement in "other" settings. However, considerable differences were noted in the percentage of placements in combinations of resource room, self-contained class, and other settings. Ten percent of the mentally retarded received services in a combination of such settings. Five percent of the learning disabled and two percent of the students with speech problems were placed in two or more of such settings. Twenty-three percent of the multi-handicapped were served in combinations of settings, about half of these being the combination of a resource room and a self-contained class.



* Cell has an estimated sample size of less than 25.

a/ The regular classroom may or may not have been included.

b/ "Other" settings include hospital or homebound programs, work study programs, vocational/prevocational skills centers, special physical education.

Figure 8.4. Percent of Handicapped Students Receiving Special Education Services in Different Settings, by Selected Handicapping Conditions.

4. Variation by Per-Pupil Expenditure

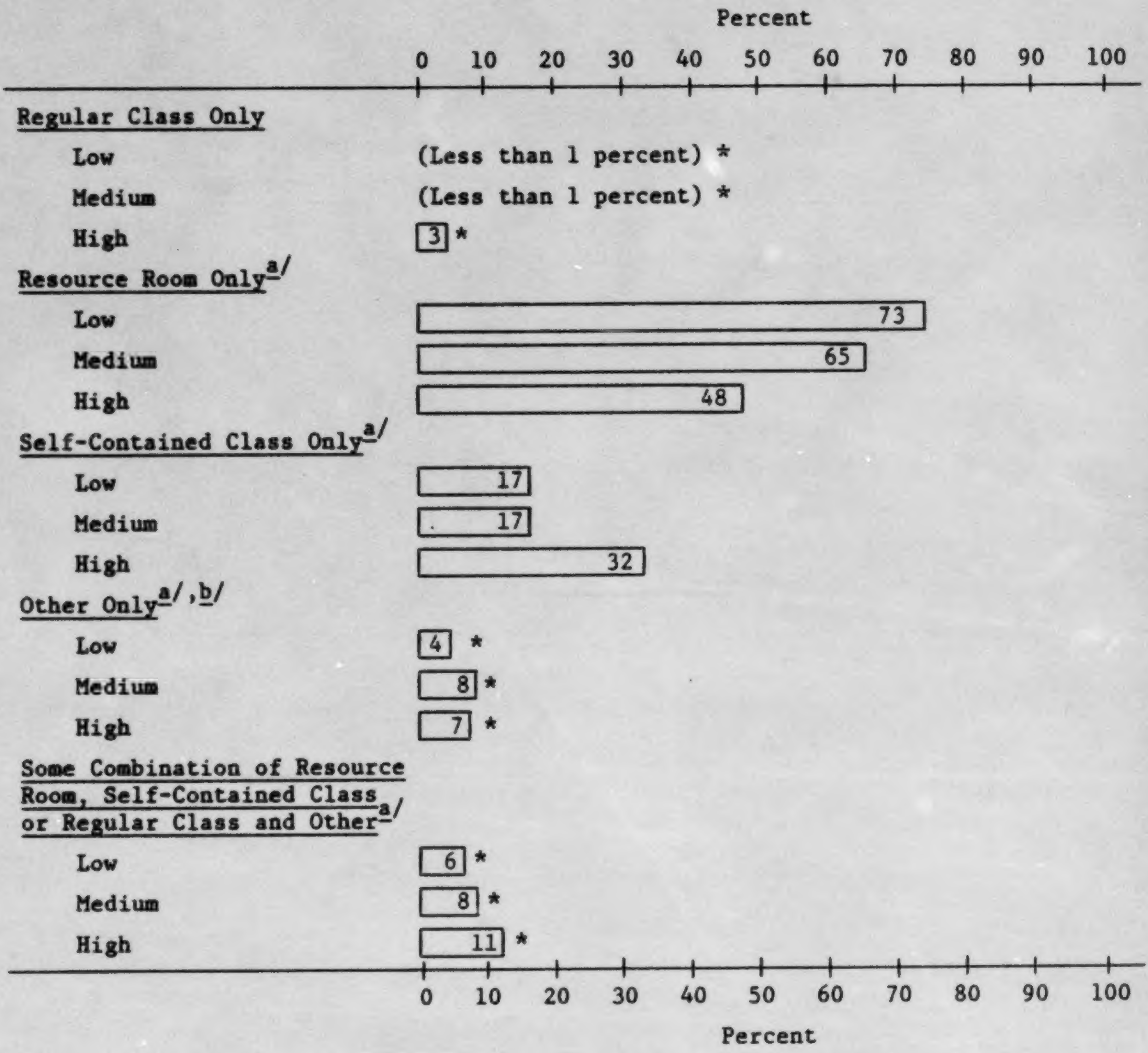
The percent of handicapped students receiving special education services in different settings was broken down by the per-pupil expenditure of school districts. The objective was to determine whether or not amount of school resources was related to type of setting used. It might be expected that school districts with high per-pupil expenditure would have more alternative services than those with low per-pupil expenditure.

Figure 8.5 displays the percent of handicapped students who received special education services in different settings by per-pupil expenditure. (Also see Table H.4.) Less than one percent of handicapped students in school districts with either low or medium per-pupil expenditure received their special education services in the regular classroom only. The regular classroom only was reported to be used for three percent of the students enrolled in districts with high per-pupil expenditure. Differences between these percents are not statistically significant.

There was some variation in the proportions of students that were reported to be receiving services in a combination of settings. Eleven percent of students in districts with high per-pupil expenditures were reported to be receiving services in a combination, while 8 percent of those in the medium per-pupil expenditure category and 6 percent of those in the low category, were so reported. If it can be inferred that placement in a combination of settings reflects the existence and use of multiple placement options, these findings suggest that districts with higher per-pupil expenditures tend to have more placement options than do districts with lower per-pupil expenditures.

Significant differences were found between district per-pupil-expenditure categories in the percents of students who received all of their special education services in either the resource room or in the self-contained classroom. Figure 8.5 shows that 73 percent of students in low per-pupil expenditure schools were served in resource rooms only, but only 48 percent of those in high expenditure schools were placed there. Also, only 17 percent of students from low expenditure schools were served only in self-contained classrooms, but 32 percent of those from high expenditure schools were so placed.

These findings provide no evidence to either support or refute the expectation of a direct relationship between district per-pupil expenditure level and range of alternative services offered. Apparently factors other than



* Cell has estimated sample size of less than 25.

a/ The regular classroom may or may not have been included.

b/ "Other" settings include hospital or homebound programs, work study programs, vocational/prevocational skills centers, special physical education.

Figure 8.5. Percent of Handicapped Students Receiving Special Education Services in Different Settings, by Per-Pupil Expenditure.

per-pupil expenditure affect the range of services and use of placement options.

II. HOURS OF SPECIAL EDUCATION PER WEEK

This section presents information about the average number of hours of special education received per week by students in regular schools. Results are provided for the two primary special education settings, resource room and self-contained classroom, and for a combination of all settings excluding the regular classroom. Results are presented for regular school students in both the Basic Survey population and the selected subpopulations used in Section I.

A. Basic Survey Population

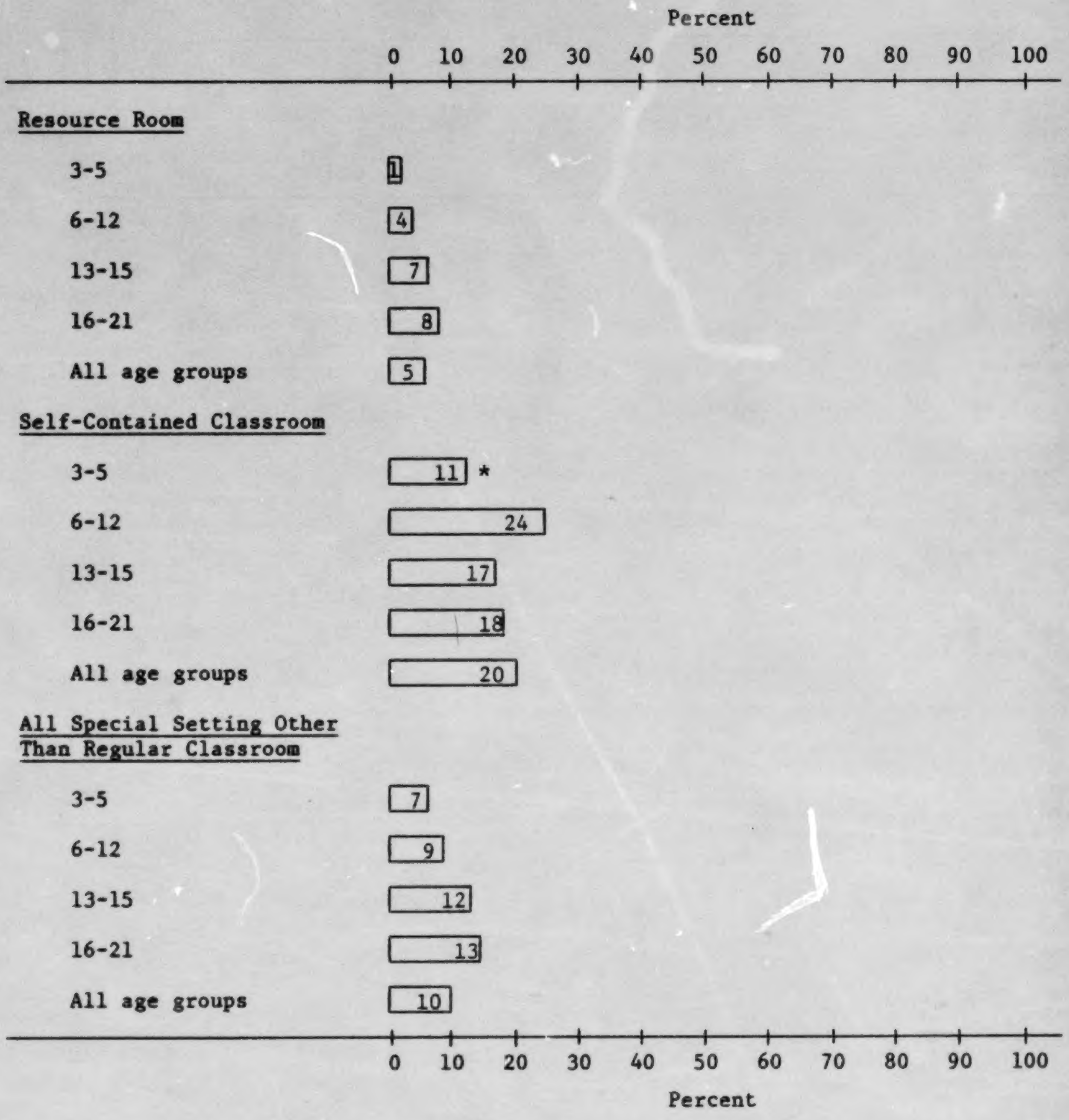
Students who received any part of their special education in resource rooms averaged about five hours per week in that setting. Students who received any part of their special education in self-contained classrooms spent, on the average, 20 hours per week in that setting.

As shows in Figure 8.6, students who received any part of their special education in any setting or combination of settings other than the regular classroom, spent, on the average, ten hours per week in such settings. From this it can be estimated, on the basis of a thirty-hour school week, that handicapped students spent an average of 20 hours per week in the regular classroom. This likely represents an upper limit since, for some schools and age groups (i.e., the 3-5 age group), the school week may be less than 30 hours. (See Table H.5 for complete statistics.)

B. Variation by Subpopulation

1. Variation by Age Groups

Figure 8.6 also shows the variation in average number of hours of special education instruction per week by the four different age groups. Students in the youngest age group received one hour of special education instruction per week in the resource room, while students in older groups received between five and eight hours of instruction. The self-contained classroom shows some difference between the age groups. Students aged 6-12 received almost 24 hours of special education instruction per week, students in the older age groups received 17 to 18 hours of such instruction, and students aged 3-5 received 11 hours. (See Table H.5 for complete statistics.)



* Cell has an estimated sample size of less than 25.

Figure 8.6. Mean Number of Instructional Hours in Special Education Received per Week by Students in Resource Rooms, Self-Contained Classrooms, and a Combination of All Special Settings, by Age Groups.

2. Variation by Handicapping Condition

The average number of instructional hours that students received special education also was broken down by handicapping condition. (See Table H.6 for complete statistics.) Certain differences were observed. Except as noted below, these differences were within an expected range.

Students classified as mentally retarded received about 12 hours of special education per week in the resource room, while learning disabled students received only about six hours. This six hours appears quite low since the resource room generally is the preferred setting for these students. Students with speech impairments spent a little more than one hour per week in resource rooms.

Mentally retarded students received just over 23 hours of special education per week in self-contained classrooms. Learning disabled students who were placed in self-contained classrooms received almost 19 hours of special education there per week.

Mentally retarded students spent just over 20 hours per week receiving special education in some setting or combination of settings other than the regular classroom. Learning disabled students received a little more than eight hours of special education per week in some other setting or combination of settings.

3. Variation by Severity of Handicap

The average number of instructional hours received by students in the various settings was analyzed by severity of handicap. (See Table H.7 for complete statistics.) No statistically significant differences were noted.

4. Variation by School District Per-Pupil Expenditure

The average number of instructional hours in special education by students was analysed by average annual per-pupil expenditure of the school district. (See Table H.8 for complete statistics.) No statistically significant differences were noted between district classifications in the number of hours of special education received in resource rooms or in self-contained classrooms. However, the average number of hours of special education received in a combination of all settings other than the regular classroom was higher for high per-pupil expenditure districts (about 12 hours) than for low and medium expenditure districts (about 9 hours each).

III. PROPORTION OF STUDENTS RECEIVING SPECIAL EDUCATION AT SITES OTHER THAN THEIR REGULAR SCHOOL, ON A PULLOUT BASIS

This section presents information about the proportion of students who received part of their special education program in some site other than the school in which they were enrolled, on a pullout basis. Unlike the data in the two previous sections, these data are presented for the entire Basic Survey population rather than for regular schools only.

A. Basic Survey Population

Only about two percent of all students in the basic survey population were pulled out of their regular school to receive special education services elsewhere. The most frequent type of setting where these services were received was a resource room in some other school. (See Table H.9 for complete statistics.)

B. Variation by Subpopulation

Since the number of students involved was quite small, data were analysed only for the regular school and special school subpopulations. No significant differences were noted between the two. (See Table H.9.)

IV. SUMMARY

The emphasis in this chapter was on the types of settings in which students received special education services.

Only about one percent of the students in regular schools received all of their special education services in the regular classroom. The greatest proportion (62 percent) of students received special education services in the resource room only, followed by 22 percent who received such services in a self-contained classroom only. Seven percent of the students were served in some other setting only, and nine percent were served in any or all combinations of settings other than the regular classroom.

Students in the 3-5 year old group received their special education services more frequently in self-contained classrooms and less frequently in resource rooms than did other age groups.

An analysis was conducted of the variation in the types of settings in which students with handicaps of different severity levels (mild, moderate, severe) received their special education services. (Since estimates of the severity of students' handicaps were provided by teachers who might have used their own frame of reference for this purpose, it is possible that the reliability of these estimates was attenuated.) There was little difference between the three groups with regard to the percent of each group that received all of their special education services only in regular classrooms or only in self-contained classrooms. Expected differences were noted between the three groups relative to receipt of special education services in resource rooms only; i.e., 51 percent of the severely handicapped received all of their special education in resource rooms, as compared to 62 and 65 percent of the mildly and moderately handicapped, respectively.

When the type of service setting was compared for selected handicapping conditions, it was found that 35 percent of those with mental retardation, 77 percent of those with learning disabilities, 89 percent of those with speech problems, and 38 percent of the multi-handicapped received their special education in resource rooms only. Forty-seven percent of those with mental retardation, 12 percent of the learning disabled, 5 percent of those with speech problems, and 32 percent of the multi-handicapped were served in self-contained classrooms only.

Evidence was not clear as to whether or not use of various types of educational settings varied by per-pupil expenditure level. Some findings suggest that school districts with higher levels of per-pupil expenditure tended to have a more complete range of placement options. Other findings suggest that higher expenditure districts tended to place a greater percentage of their handicapped students in self-contained classrooms. It is probable that factors other than per-pupil expenditure affect the range of special education services and use of placement options.

Handicapped students assigned to resource rooms received about five hours of special education per week in this setting. Those assigned to self-contained classrooms received about 20 hours of special education in self-contained classrooms. An analysis of hours of special education for the different age groups, for selected handicapping conditions, for severity of handicap, and by per-pupil expenditure levels indicated some differences, but these generally were in expected directions.

Only about two percent of all students in the Basic Survey population received a part of their special education on a pullout basis in some setting other than their regular school. Those who were pulled out most frequently went to a resource room in other schools.

Chapter 9

Summary, Conclusions, and Implications

This chapter consists of two sections. The first section summarizes the major findings of the Basic Survey. The second section lists some conclusions and implications of these findings.

I. SUMMARY

IEPs and related student, school, and school district information were collected and analyzed for a national sample of students, ages 3-21, who were enrolled in LEA-administered public schools on 1 December 1978. A trained survey specialist visited each of the 507 sample schools and: (a) selected a sample of five to eight students from each school; (b) photocopied, and deleted any personally identifiable information that was contained in, the IEP of each selected student; and (c) distributed, collected, and field-edited three questionnaires designed to obtain related information about each of the 2,657 students, 507 schools, and 208 school districts in the sample. Sample students were enrolled in schools located in a total of 42 states.

All collected IEPs and questionnaires were returned to RTI where they were entered into a receipt and control system for further processing. The properties and contents of each IEP were described at RTI through the application of an IEP Evaluation Checklist, thus generating a set of coded responses for each IEP. The coded checklist forms and questionnaire items were edited manually, keyed into machine-readable files, machine-edited, weighted properly, and formatted for subsequent analyses.

Analyses of these data indicate that in the 1978-79 school year IEPs were developed for most handicapped students, and that most of the IEPs contained the majority of required elements. These results suggest that school districts had moved quickly towards implementing the IEP provisions of P.L. 94-142. At the same time, it is clear that there are a number of areas in which IEPs can be improved. These areas, as well as other specific findings, are presented below in a brief response to each of the ten research questions posed for the Basic Survey.

The descriptive measures used to answer these questions are estimates of population parameters that were computed from the weighted sample data. The estimated standard errors associated with these population estimates were also computed and reported.

A. What Are the Characteristics of the Students Who Have IEPs and Are Enrolled in Public Schools, and of the Schools and School Districts in Which They Are Enrolled?

1. Students

About three million handicapped students, ages 3-21, were estimated to be enrolled and receiving special education services in LEA-administered public elementary and secondary schools on 1 December 1978. Approximately 95 percent of these students had IEPs. The vast majority of these students (85 percent) received services that were funded at least partially by P.L. 94-142.

General explanations for the nonavailability of IEPs were obtained for approximately one-half of the students for whom IEPs had not been prepared. These findings suggest a misunderstanding among some school personnel as to the intent of P.L. 94-142 that an IEP be prepared for all handicapped students prior to receiving special education and related services, regardless of the funding source of such services. That is, some of the students who were receiving services were reported as not having IEPs because the services were funded by regular Title I and "IEPs were not required."

Handicapped students were distributed over the full range of grade level, age, race, and sex classifications used in the study. Almost two-thirds of all the students were in the 6-12 age range; more males than females were handicapped (by a factor of about 1.75); and 75 percent of the students were non-Hispanic whites and 19 percent were non-Hispanic blacks.

Eighty-four percent of the students had single handicaps distributed as follows: learning disabled (30 percent); speech impaired (24 percent); mentally retarded (20 percent); other health impaired (4 percent); emotionally disturbed (3 percent); deaf and hard of hearing (1 percent); visually handicapped (1 percent); and orthopedically impaired (4 percent). Some differences were noted in these patterns of disability for different racial groups; e.g., the largest percents of whites and Hispanics were classified as learning disabled, whereas the largest percents of blacks and Indians were classified as mentally retarded.

The remaining 16 percent had multiple handicaps, most of which were combinations of two handicaps. About three-fourths of all students with double handicaps had one of the following four combinations: learning disabled and speech impaired; learning disabled and emotionally disturbed; mentally retarded and speech impaired; and mentally retarded and learning disabled.

When students were classified by the severity of their handicaps, the approximate percents with mild, moderate, and severe handicaps were 51, 36, and 13, respectively.

2. Schools

Two percent of the schools that served handicapped students were classified as special schools, and four percent of the handicapped students with IEPs were enrolled in these special schools. Eighty-three percent of all schools serving handicapped students were elementary schools; the remaining 17 percent of the schools were classified as secondary (14 percent) and elementary/secondary (3 percent). About one-third of the schools were located in rural communities, as compared to 27 percent in small cities, 21 percent in urban areas, and 18 percent in suburban areas.

Looking at the distribution of handicapped students, 83 percent of all handicapped students were enrolled in elementary schools, 12 percent were enrolled in secondary schools, and 5 percent were enrolled in elementary/secondary schools. Twenty-one percent of the national population of handicapped students were served in rural schools, followed by 22 percent who were served in suburban schools, 28 percent in small city schools, and 29 percent in urban schools.

When schools were classified by the percent of their enrolled students that were handicapped, about one-third of the regular schools had less than 6 percent of their enrolled students classified as handicapped, about one third had from 6 to 9 percent, and about one-third had 10 percent or more of their students so classified.

3. School Districts

Seventy-seven percent of the school districts enrolling handicapped students were small districts, slightly less than 20 percent were medium-sized districts, and 5 percent were large districts. However, only about one-fourth of all students with IEPs were enrolled in small districts; large and medium-sized districts enrolled 47 and 30 percent of the students with IEPs, respectively.

Twenty-five percent of all handicapped students were enrolled in school districts with a low annual per-pupil-expenditure level, 44 percent were enrolled in districts that had a medium expenditure level, and 31 percent were enrolled in districts with a high expenditure level.

Three-fourths of all districts served some of their handicapped students through cooperative service arrangements, while 40 percent served all of their students under such arrangements. Most of the districts (about 80 percent) with cooperative arrangements were small districts. Forty percent of all districts contracted with private schools or institutions for the provision of special services to a portion of their students. Seven percent of the districts administered special schools (half of these districts were large districts).

B. What Do IEPs Look Like?

IEPs had an average (mean) length of almost five pages; however, about half of all IEPs consisted of less than three and one-half pages. The majority were handwritten and virtually all were reasonably easy to read.

IEP formats contained headings for a variety of information areas. Many of these headings were related to information which, although not required by P.L. 94-142, was important to understanding the student's special needs, interests, and planned program. Headings for the mandated information areas, as well as for some of the more important nonmandated areas, were found less frequently than expected.

Formats for about two-thirds of the IEPs tended to restrict the number of annual goals that could be listed, and almost 40 percent had a similar restriction for short-term objectives. Also, about one-fourth of the IEPs had formats that appeared to limit parental approval to a portion of the document; i.e., the parent was requested to sign a document that did not contain goals and/or objectives.

Three percent of the IEPs consisted of multiple documents that were either prepared by different teachers or service sources, or prepared as separate placement and implementation plans.

C. What Kinds of Information Do IEPs Contain and How Is This Information Presented?

A little more than one-third of the IEPs contained all of the 11 information items that the Act requires; about three-fourths contained 10 of the 11 mandated items, and 90 percent contained 7 of the 11 items.

Virtually all of the IEPs contained information about the specific educational services to be provided and the projected initiation date and anticipated duration of such services. The specific educational services to be provided were stated in, or inferred from, annual goals and/or short-term objectives. Information about related services generally was specified in the form of a listing of such services. The projected dates for initiation of specific services and the anticipated duration of such services usually were stated in reasonably precise terms.

All but a small percentage of the IEPs contained annual goals and/or short-term objectives. The mean number of goals listed in IEPs that had at least one annual goal was six, while the median was just over three. For objectives, the mean was 26 and the median was about 11. The mean number of annual goals and short-term objectives in IEPs from special schools were higher than the corresponding means for regular schools. A small percent (15) of the IEPs contained a prioritized listing of goals instead of a simple listing (this additional refinement is not required by the Act).

About 65 percent of the IEPs contained at least one short-term objective that was written in measurable terms, or otherwise included at least minimal criteria for evaluating whether the objectives were met. Approximately one-third of the objectives listed in an "average" IEP either were written in measurable terms or otherwise included evaluation criteria.

About 90 percent of the IEPs contained a statement of the present level of educational performance in at least one academic or functional area. Though not required by the Act, about one-half of these IEPs also contained at least some data (e.g., test scores) to support this information. Present-level-of-performance information for each of at least three academic or functional areas was contained in about half of the IEPs. One-fifth of the IEPs included the date of the assessment of present level of performance.

The two mandated information areas that were included least frequently in IEPs were: (1) proposed evaluation criteria; and (2) a statement of the extent of participation in the regular education program. Information about proposed evaluation procedures, criteria, and schedules (including assurances of at least an annual evaluation) generally was not clearly stated, whereas statements as to the extent to which students would participate in regular education programs (or in special education programs) generally were explicitly stated, either as a proportion of time or in minutes, hours, or class periods.

IEPs also contained considerable nonmandated information, for example: basic student descriptors (age, race, sex, grade level, and type of handicap); information about the student's assessment, placement, general educational background, and proposed program of special services; and some documentation of the process whereby the student's IEP was developed, approved, and reviewed.

In summary, IEPs generally contained the kinds of information that are solicited through the headings in the IEP formats. That is, there was a strong and direct relationship between the inclusion of a heading in the IEP format and the provision of related information.

D. Who Participates in the Development and Approval of IEPs?

Based on information gleaned from the IEP documents, a wide range of school personnel were involved in the development and approval of IEPs. Though it is felt that these data provide a relatively good indicator of the types of involved personnel, these findings may not reflect all those who actually participated in the development of IEPs since the Act does not require that IEPs contain either a listing or signatures of participants.

Slightly over 90 percent of the IEPs listed at least one participant, and slightly over 80 percent contained at least one signature. The average number of participants on IEPs that listed at least one participant was 4; a similar statistic for signers was 3.6.

Almost three-fourths of the IEPs listed at least one teacher or therapist as a participant and 60 percent were signed by at least one person in this category. Administrative personnel were indicated as participants in 60 percent of the IEPs and as signers in 50 percent. Half the IEPs had a representative from both of these categories (teachers or therapists, and administrative personnel) listed as participants, and 40 percent had representatives from both groups listed as signers. Ancillary personnel (e.g., school psychologists, counselors, and social workers) were listed as participants on about one-fourth of the IEPs, and as signers on about one-fifth of the documents. Parents (guardians/surrogates) were reflected as participants on just under two-thirds, and as signers on just over one-half, of the IEPs. Students were rarely listed in the IEP as a participant or signer.

Just over one-third of all IEPs had all three of the mandated categories (teachers, LEA administrative representatives, and parents or guardians) listed as participants, while a slightly smaller percent had them listed as signers. These percents for mandated categories are probably underestimates since persons with other specific titles, e.g., counselors, might have served on IEP committees as LEA administrative representatives.

Supplementary information obtained directly from the teachers most knowledgeable about the development of students' IEPs indicated that about three-fourths of the parents/guardians signed or verbally approved the IEP (less than one percent refused to approve the document), three-fourths discussed the completed IEP with school personnel, just over one-half met with the committee to discuss the completed IEP, and almost one-half provided inputs to the committee during the development of the IEP. Teachers also reported that slightly over one-third of the handicapped students discussed their IEPs with school personnel, and that ten percent provided input during the IEP development process.

E. What Types of Special Education and Related Services Are Specified in IEPs?

The special education services specified in IEPs were described in terms of 13 different academic and functional areas: (1) reading (or oral or written English); (2) mathematics; (3) other academic; (4) social adaptation; (5) self-help skills; (6) emotional; (7) physical education; (8) motor skills; (9) speech; (10) visual acuity; (11) hearing; (12) vocational/prevocational; and (13) other.

Assessment services, as reflected by a statement of present level of functioning, were indicated most often in the academic areas--about two-thirds of the IEPs indicated assessment services in reading (or oral or written language), slightly more than one-half in mathematics, and about 40 percent in "other academic" areas. Social adaptation and speech, the two functional areas for which assessment services were most often indicated, each had present-level-of-functioning statements in about one-third of the IEPs. Level-of-functioning information for motor skills was found in a little less than one-fourth of the IEPs, while such information for visual acuity and hearing each were found in about one-fifth of the IEPs. For none of the remaining five areas (self-help skills, other, vocational/prevocational, physical education, and emotional) was level-of-functioning information found in more than ten percent of the IEPs. Although assessment information often was presented as statements of needs, many of the IEPs also included statements of strengths.

Using statements of goals and/or objectives as indicators of the kinds of educational programming a student was to have received, IEPs across the nation reflected educational programming in all 13 academic/functional areas. The extent to which IEPs contained educational programming in each of these 13 areas generally followed a pattern similar to that stated above for the provision of assessment services, except that the percent of IEPs that indicated educational programming was lower in most academic/functional areas than the percent for which an assessment service was indicated. Such differences were expected because many IEPs contained assessment information that reflected only strengths in certain academic/functional areas, thus precluding a need for special educational programming.

Thirteen percent of the IEPs listed one or more of the following related services (services are listed in descending order according to frequency of occurrence): transportation; medical services; other; counseling; psychological services; occupational therapy; physical therapy; social work service; audiology; parent counseling and training; and recreation. Ten percent of the IEPs listed only one related service, two percent listed two related services, and the remaining one percent listed three or more related services.

F. How Informative and Internally Consistent Are IEPs?

Based on a global view of the IEP document, about 40 percent of the IEPs were informative and internally consistent. While 77 percent generally met most of the requirements of the Act, only 5 percent of these documents were considered to be exceptionally informative and internally consistent.

The two major shortcomings of IEPs with respect to completeness and internal consistency were the failure (1) to include all mandated information items, and (2) to specify a direct and identifiable link between areas of need and the services to be provided (as reflected by statements of goals and objectives).

The first shortcoming was discussed earlier in answer to the study question about the kinds of information contained in IEPs. Regarding the second shortcoming, about 71 percent of the IEPs included at least one incident of a

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goal statement that related to a short-term objective that related to an area of indicated need. However, a significant percent of the IEPs either had statements of needs in functional/academic areas for which goals and/or objectives were not included, or they contained goals and/or objectives for areas in which a need statement was not included.

The academic area of reading/English was the area for which IEPs most often contained all three statements; i.e., a need, at least one related goal, and at least one related objective (61 percent of the IEPs that had at least one of the three types of statements in this area had all three). Of the other nine areas studied, only speech and mathematics were complete and internally consistent in at least one-half of the IEPs for which they were listed. None of the remaining areas were complete on more than about one-fourth of the applicable IEPs.

In several academic/functional areas, relatively large percentages of IEPs contained need statements without related goals or objectives. These percents ranged over academic/functional areas from a low of about 10 to a high of about 45 and were mostly in the 15-30 range. Also, many of the IEPs contained goal statements without related statements of need and/or objectives, and many contained objectives without one or both of the other two components. IEPs that contained needs only, or goals only, generally can be considered extremely incomplete with respect to communicating individual education programs.

G. In What Service Setting, and for What Proportion of the Academic Week, Do Students Receive Special Education Services?

Four percent of the handicapped students with IEPs were enrolled in special schools. Of the remaining 96 percent were enrolled in regular schools, only about one percent received all of their special education services in the regular classroom. The greatest proportion (62 percent) of these "regular school" students received their special education services in the resource room only, followed by 22 percent who received such services in a self-contained classroom only. Seven percent of the students were served in some "other" setting only (e.g., hospital or homebound program, work study program, and special physical education) and 9 percent were served in any or all combinations of settings other than the regular clasroom. (Because of the way in which these data were collected, it is possible that a small percent of students who are indicated as receiving special education services in the "resource room only" or "other only" might also have received such services in the regular classroom.)

Handicapped students assigned to resource rooms received about five hours of special education per week in this setting. Those assigned to self-contained classrooms received about 20 hours of special education in that setting.

Only about two percent of all students in the Basic Survey population received a part of their special education on a pullout basis in some setting other than their regular school.

H. How Do the Types, Service Settings, and Amounts of Special Education Services Specified in IEPs Vary by Selected Student and School Characteristics?

1. Types of Special Education and Related Services

The types of special education and related services indicated in IEPs were analyzed separately for students enrolled in regular and special schools. Some service-related data also were analyzed separately by age levels.

a. School Type

When the IEPs of students in regular and special schools were analyzed and compared with respect to the information they contained about assessment services, special school IEPs more frequently contained statements of present-level-of-functioning in various academic/functional areas, and they more frequently included statements of needs and/or strengths by those areas. The area of speech constituted the single exception to this general finding; i.e., the IEPs of regular school students more frequently contained assessment information in this area.

When similar comparisons were made with regard to educational programming, special school IEPs generally reflected more educational programming in each of the academic/functional areas. Speech and hearing, the two areas for which larger percents of regular school IEPs contained goal or objective statements, were the two exceptions of this general finding.

More of the special school students received one or more related services than did students in regular schools. Three related services (transportation, occupational therapy, and physical therapy) were specified more often in special school IEPs than in regular school IEPs.

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b. Age Levels

Educational programming within academic/functional areas, as indicated by the presence of at least one short-term objective, was examined separately by student age levels. Two trends were noted. One, there was an upward trend in the academic areas; i.e., the higher the age level, the higher the percent of IEPs with at least one objective. Two, there was a downward trend in the functional areas of motor skills and speech; i.e., the higher the age level, the lower the percent of IEPs with at least one objective.

2. Service Settings for, and Amounts of, Special Services

IEP data related to service settings for, and amount of, special services were analyzed for students classified by four variables: age levels; severity of handicap; type of handicap; and level of per-pupil expenditure for district of enrollment.

a. Age Levels

Students in the 3-5 year old group tended to receive their special education services more frequently in self-contained classrooms and less frequently in resource rooms than did the other age groups (6-12, 13-15, 16-21).

There were slight variations between age levels in the average number of hours per week that students received special education in resource rooms and self-contained classrooms. Younger students (the 3-5 and 6-12 age groups) received fewer hours of special education per week in resource rooms than did students in the 13-15 and 16-21 age groups. Students in the 6-12 age group received more hours of special education per week in self-contained classrooms than did students in the other three age groupings.

b. Severity of Handicap

When students were classified in three groups according to the severity of their handicaps (mild, moderate, and severe), there were no significant differences between the percents of students in each group who received all of their special education services only in regular classrooms or only in self-contained classrooms. However, a smaller percent of the severely handicapped students received all of their services in resource rooms only, when compared to the mildly and moderately handicapped students.

There were no significant differences between severity levels with respect to the average number of hours of special education received in the various settings.

c. Type of Handicap

The IEPs of students who had one of the following four handicapping conditions were analyzed with respect to the educational setting in which services were received: mentally retarded (MR); learning disabled (LD); speech impaired (SI); and multi-handicapped (MH). These conditions were selected because they occurred with reasonably high frequency.

As was expected, there was considerable variation in the percents of students with different types of handicaps who received their special education services in resource rooms only and in self-contained classrooms only. Very few of the students in any of these handicap categories were served only in regular classrooms.

No significant differences were noted in placement in "other" settings. However, considerable differences were noted in the percentage of placements in combinations of resource room, self-contained class, and other settings. Ten percent of the mentally retarded received services in a combination of such settings. Five percent of the learning disabled and two percent of the students with speech problems were placed in two or more of such settings. Twenty-three percent of the multi-handicapped were served in combinations of settings, about half of these being the combination of a resource room and a self-contained class.

The average number of hours of special education received per week in the different service settings varied considerably by type of handicap (the average time for each setting was based on the number of students who received some special education in the setting).

d. District Per-Pupil Expenditure Level

There was considerable variation between districts with low, medium, and high per-pupil expenditure levels in the percents of their students who received their special education services in the various educational settings. A negative relationship was noted between expenditure levels and the percents of students who received their special education in resource rooms only. This relationship did not hold for self-contained classrooms only; i.e., larger percents of students in high-level districts received their services in this setting than did students in medium- and low-level districts.

Also, there was some variation in the proportions of students that were reported to be receiving services in a combination of settings, with a suggested direct relationship between per-pupil expenditure levels and the percent

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of students receiving special education services in a combination of settings. If it can be inferred that placement in a combination of settings reflects the existence and use of multiple placement options, these findings suggest that districts with higher per-pupil expenditures tend to have more placement options than do districts with lower per-pupil expenditures.

I. How Do the Formats, Contents, Properties, and Development Processes of IEPs Vary by Selected Student, School, and School District Characteristics?

Two approaches were used to analyze the IEPs of various student subpopulations to determine the extent to which the formats, properties, contents, and development processes of these documents varied between subpopulations. The first approach was an exploratory investigation in which each IEP was categorized in one of four levels based on a global view of the IEP's informativeness and internal consistency. An attempt was made to model the four informativeness/internal consistency levels, using these levels as dependent or criterion measures. The modeling effort used as independent or predictor variables all possible combinations of four student variables (nature of handicap, severity of handicap, age, and race), five school variables (type, grade level organization, community location, size, and handicapped/total enrollment ratio), and two school district variables (size and per-pupil expenditure level). No significant correlation or relationship was identified between the four descriptive levels and any of the predictor measures, taken singly or in all possible combinations. It was concluded that the four levels were perhaps more a function of the characteristics of the personnel primarily responsible for preparing the IEPs (e.g., their training and experience and their attitude toward the IEP concept).

The second approach involved the analyses of discrete portions of the IEPs of certain subpopulations. Student age levels and type of school they attended were most often used to define these subpopulations; severity of student handicap, and school district size and per-pupil expenditure levels sometimes were used, when appropriate, for this purpose. In general, the results of both approaches were in agreement. That is, although the extent to which certain specific attributes or properties were found in IEPs might vary between some subpopulations, such variation was not consistent across a significant number of these attributes or properties. Major findings of the second approach are summarized below.

1. Age Levels

IEPs of students in the 3-5 age group, when compared to the other three age groupings, less often contained a statement of the extent to which the student will participate in regular education programs. There appeared to be a negative relationship between age levels and the percent of objectives in IEPs that were written in measurable terms; i.e., the average percent of objectives written in measurable terms decreased as student age increased.

There was a definite trend of decreasing parent participation in development of the IEP as student age increased. The reverse was true for student participation in the development of IEP, i.e., student participation increased as age increased. There was greater participation of counselors in the preparation of IEPs for the older students (ages 13-15 and 16-21) than for students in the 6-12 age range; and speech and language therapists participated more heavily in the development of IEPs for younger students (ages 3-5 and 6-12) than for the other two age levels.

2. School Type

IEPs for students enrolled in special schools were significantly longer than those of students enrolled in regular schools. Also, the mean number of annual goals and objectives in IEPs from special schools were higher than the corresponding means from regular schools.

Social workers, special education teachers, and speech and language therapists participated at higher rates in the development of IEPs in regular schools than in special schools, whereas physical or occupational therapists participated at higher rates in special schools. A greater percent of students discussed their completed IEPs with school personnel in regular schools than in special schools.

3. Severity of Handicap

The data were suggestive of three trends regarding the types of persons who participated in the development of IEPs when students were classified by the severity of their handicaps: (a) greater participation by LEA representatives for students with severe levels of handicapping than for students with mild levels; (b) greater participation by parents of students with severe handicapping conditions than by parents of students with mild handicapping conditions; and (c) greater participation of at least one representative from each of the three mandated categories on the IEP committees of severely handicapped students than on the committees of the mildly and moderately handicapped.

4. School District Size

IEPs for students enrolled in small districts consisted of fewer pages than those prepared for students in medium and large districts.

5. District Per-Pupil Expenditure Levels

A negative relationship was noted between school district per-pupil expenditure levels and the frequency with which IEPs contained a statement of the extent to which the student will be able to participate in the regular education program; i.e., the percent of IEPs containing at least one such statement decreased as the district per-pupil expenditure increased.

The average IEP prepared for students in districts with a low level of per-pupil expenditure had a greater percent of its objectives written in measurable terms than did the average IEP prepared in medium level districts.

The rate at which teachers and therapists participated in the development of IEPs was significantly greater for students in school districts with a low level of per-pupil expenditure than for students in districts with a medium expenditure level. There was greater participation in medium-level districts than in low-level districts by "ancillary personnel." Within the category of ancillary personnel, significantly greater percents of the IEPs developed in medium- and high-level districts listed school psychologists as participants than did the IEPs developed in low-level districts.

II. CONCLUSIONS AND IMPLICATIONS

The findings of the Basic Survey present a portrait of special education programs in the early stages of meeting the IEP requirement of P.L. 94-142. State and local education agencies appeared to have made a good start toward full implementation of the IEP mandate of P.L. 94-142. In the second school year following the effective date of the IEP requirement, about 95 percent of the students receiving special education and related services had an IEP. About three-fourths of the IEPs contained 10 of the 11 mandated information items, and about 40 percent of them were considered to be at least reasonably informative and internally consistent. Many IEPs contained nonmandated information that generally made them more informative. A variety of services were specified in the IEPs, and a wide range of personnel were involved in the development and approval of these documents, including a significant proportion of parents (guardians/surrogates). As such, IEPs appear to be a good source of information about educational programming.

On the other hand, a significant proportion did not contain: (a) all the mandated information items, and/or (b) a direct link between areas of need and the services to be provided (as reflected by the annual goals and short-term objectives). Even under the generous criteria used in the study, only about one-third of the IEPs contained all the information mandated by P.L. 94-142.

Although the educational programming information contained in IEPs may not be complete, it does raise some questions about existing practices regarding assessment and the provision of services in the least restrictive environment. For example, when the service-related information was combined with the information obtained from teachers about the nature of students' handicaps: whites comprised a disproportionately high percent of the learning disabled population, while blacks comprised an equally high percent of the mentally retarded population; only three percent of the handicapped population was classified as being emotionally disturbed; there was a very low incidence of students classified as being both learning disabled and emotionally disturbed; about one-third of the severely handicapped received all of their special education services in resource rooms; only about one percent of all students received all of their special education services in the regular classroom; and a significant proportion (18 percent) of mildly handicapped received all of their services in self-contained classrooms.

Three sets of findings of the study have important implications for enhancing compliance with the IEP provision in P.L. 94-142 (and its supporting regulations), especially with regard to improving the informativeness and internal consistency of the IEPs. First, it is apparent that some school personnel may have misunderstood the intent of P.L. 94-142 that an IEP be prepared for all handicapped students, regardless of the funding source for the services they receive, and that the IEP be in effect before special education and related services are provided. This intent of the Act should be clarified and communicated to those responsible for preparing IEPs.

Second, it is clear that there is a strong relationship between IEP format and content. As a result, more attention to formats, along with some monitoring of completed documents, would result in a significant improvement in the completeness and internal consistency of the IEP document. For example, IEP formats should include specific headings for desired information, and these headings should be structured to promote internal consistency with respect to linking each specific academic/functional area in which a need is indicated to its associated goals and objectives. If the criteria and evaluation procedures for determining whether each short-term objective is being achieved are not included in the objective (i.e., the objective is not stated in measurable terms), headings for this information also should be placed so the appropriate information can be linked directly to specific objectives.

Third, it is relatively clear from the patterns of variability examined in the study that the person(s) developing the IEP is (are) a key to the quality of the document. The importance of the training of the professionals responsible for educational programming and/or IEP development is certainly a major implication of the findings of the survey. Study findings indicate that such training should focus on improving the internal consistency of IEPs, and on specifying evaluation procedures and criteria for determining the achievement of objectives. Evaluation procedures and criteria should be stated either as separate entities or as part of the statements of objectives.

These findings and conclusions provide a summary description or "snapshot" of IEPs for the 1978-79 school year. There is reason to believe that this picture will improve somewhat in the near future as state and local special educators become more experienced with this new program and as related federal policy is clarified (the findings presented in Volume IV indicate that significant improvements were made from the 1977-78 school year to the 1978-79 school year).[1] These findings, therefore, provide an important baseline for evaluating changes that occur over time in the properties and contents of IEPs, as well as for assessing the effectiveness of P.L. 94-142.

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[1] An example of policy clarification at the Federal level is the policy paper (DAS Information Bulletin, Number 64, dated May 23, 1980) that was sent by BEH to State Directors of Special Education, State Part B Coordinators, and State P.L. 89-313 Coordinators. This policy paper, which was written to respond to policy issues and concerns regarding the IEP requirements that have been raised over the past two years, focuses on a number of problem areas that were identified in this survey. For example, it emphasizes that an IEP must be developed before special education and related services are provided to the student, and that an IEP is required for every handicapped student--two areas of the Act that were apparently misunderstood by personnel in a significant proportion of those schools that reported serving students who did not have IEPs. This policy paper also clarifies the requirements that must be met for public agencies to be in compliance of the IEP provision in the Act and the regulations as to the types of information that IEPs must contain, emphasizing that there must be a direct and identifiable link between the present levels of educational performance and other components of the IEP.

Appendix A

Relationships Between Instrument Items and Questions Addressed by the Basic Survey

Appendix A

RELATIONSHIPS BETWEEN INSTRUMENT ITEMS AND QUESTIONS ADDRESSED BY THE BASIC SURVEY

Questions to be Addressed	Related Questionnaire Items[a]
I. What do IEPs look like?	
1. How many pages do they contain?	EC 1
2. What proportion are legible and reasonably easy to read?	EC 2
3. What types of information headings do they contain?	EC 3(Col A)
4. What proportion of IEPs have formats that limit the number of annual goals or short-term objectives?	EC 2
5. What proportion of IEPs have formats that restrict parental approval to only a portion of the IEP?	EC 5
6. What proportion of IEPs consist of separate documents prepared:	
a. By different teachers or service sources?	EC 2
b. For purposes of placement or implementation?	EC 2
II. What kinds of information do IEPs contain?	
1. What proportion of IEPs contain mandated information? That is, what proportion contain:	
a. A statement of student's present level of functioning?	EC 6 (Col A)
b. Annual goals?	EC 6 (Col E)
c. Short-term objectives?	EC 7 (Col A)

[a] EC = IEP Evaluation Checklist; SCQ = Student Characteristics Questionnaire; and; SCHQ = School Characteristics Questionnaire; SDCQ = School District Characteristics Questionnaire; SFCQ = State/Special Facility Characteristics Questionnaire; SIP = Sample Information Protocol; SP = Level 2 Substudy Protocol; SIR = Sampling Information Record; SSLF = Student Listing Form; DRF1 = Data-of-Record Form 1; DRF2 = Data-of-Record Form 2; DRF3 = Data-of-Record Form 3; DRF4 = Data-of-Record Form 4; MRS = Multiple Reporting Sheet.

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Questions to be Addressed	Related Questionnaire Items
d. A statement of special education/related services to be provided?	EC 3 (Col B--Items 13,14,16,27,29,30); EC 10
e. A statement of extent of participation in regular program?	EC 9
f. The projected date for initiation of services?	EC 12
g. A statement of expected duration of services?	EC 13
h. Objective evaluation criteria?	EC 7 (Col B)
i. Evaluation procedures?	EC 14
j. Evaluation schedule?	EC 15
k. A statement regarding annual evaluation?	EC 16
2. What is the distribution of IEPs by the number of goal statements contained?	EC 6 (Col E)
3. What is the distribution of IEPs by the number of short-term objectives contained?	EC 7 (Col A)
4. What proportion of IEPs contain information in all 11 of the above mandated evaluation dimensions? In 10 of the 11? In 9 of the 11? ... In only 1 of the 11?	Items specified in EC 1-16 above
5. To what extent do IEPs contain information in addition to that mandated by Section 602 of P.L. 94-142?	EC 3 (Col B)
III. How is information presented in IEPs?	
1. How are statements regarding the student's level of functioning presented?	EC 6
a. With supporting data?	EC 6 A & B
b. Without supporting data?	EC 6 A
c. With statement that special education is needed?	EC 6 C
d. With statement that special education is not needed?	EC 6 D

- continued -

A.3

Questions to be Addressed	Related Questionnaire Items
2. How are annual goal statements presented?	
a. With statement of expected behavior?	EC 6 E & F
b. Without statement of expected behavior?	EC 6 E
3. How are short-term objectives presented?	
a. With/without reference to an established curriculum?	EC 7 A & B/EC 7 A
b. With/without logical statement of expected behavior?	EC 7 A & B/EC 7 A
c. In specific time frames?	EC 8
4. How are statements of services presented?	
a. A placement recommendation?	EC 3 (Col B), 13
b. Services to be provided?	EC 3 (Col B), 14
c. Personnel responsible for services?	EC 3 (Col B), 16
d. Annual goals and/or short-term objectives?	EC 3 (Col B), 27 and 29
e. Recommended instructional materials, resources, strategies, or techniques?	EC 3 (Col B), 30
5. How are dates regarding the initiation of services presented?	
a. Explicitly?	EC 12 1
b. Implicitly?	EC 12 2 & 3
c. Insufficiently?	EC 12 4
6. How are the statements regarding the duration of services presented?	
a. Explicitly?	EC 13 1
b. Implicitly?	EC 13 2 & 3
c. "As long as needed"?	EC 13 4
d. Insufficiently?	EC 13 5

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Questions to be Addressed	Related Questionnaire Items
7. How are evaluation statements presented?	
a. Procedures explicit/implicit/cannot be determined?	EC 14 1 & 2; EC 14 3/EC 14 4
b. Schedules explicit/implicit/cannot be determined?	EC 15 1/EC 15 2 & 3; EC 15 4
8. How many objectives are presented in terms of an annual evaluation?	
a. Some?	EC 16 2
b. All?	EC 16 1
c. None?	EC 16 3
d. Cannot be determined?	EC 16 4
9. What proportion of IEPs contain a statement of the rationale for the student not participating in the regular program?	EC 11
IV. Who participates in the development and approval of IEPs?	
1. What is the frequency distribution of IEPs by the number of signatures they contain, and by the titles of the signers (e.g., teachers, parents, principals, counselors, psychologists, students)?	EC 4 (Col B)
2. What is the frequency distribution of IEPs by the number and titles of personnel listed on the IEP as having participated in the IEP process?	EC 4 (Col A)
3. For what proportion of IEPs did parents participate in the IEP process?	SCQ 4f
4. For what proportion of IEPs did students participate in the IEP process? For what proportion have students discussed their IEPs with a teacher, counselor, or other school representative?	SCQ 4g and 4h
5. For those IEPs in which parental participation was indicated, in what proportion of IEPs did parents participate by:	
a. Signing the IEP?	SCQ 4a
b. Verbally (in person or by telephone) approving the IEP?	SCQ 4b

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Questions to be Addressed	Related Questionnaire Items
c. Refusing to approve the IEP on the basis of their considering the IEP inappropriate?	SCQ 4c and EC 5
d. Discussing the completed IEP with a teacher, counselor, or other school representative?	SCQ 4d
e. Meeting with the IEP committee to discuss the developed IEP?	SCQ 4e
f. Participating in the development of the IEP; that is, sitting with the IEP committee during the development process and provided inputs to the IEP?	SCQ 4f
g. Various combinations of the above?	SCQ 4
V. What types of special education and related services are specified in IEPs?	
1. In what academic and functional areas are specific education services provided, singularly and in various combinations thereof?	EC 7 (Cols A & D)
2. What kinds of, and how many related services are provided, singularly and in various combinations thereof?	EC 10
3. In what academic and functional areas is there a determination that special education is needed/not needed because of the present level of functioning?	EC 6 A, C & D
4. In what academic and functional areas was supporting data listed for present-level-of-functioning statements?	EC 6 B
5. In what academic and functional areas does a goal statement reflect a service which matches a statement of need?	EC 6 C and EC 6 E
6. In what academic and functional areas does an objective reflect a service which matches a goal statement?	EC 6 E and EC 7 A
VI. How informative and internally consistent are IEPs?	
1. What proportion are internally consistent in that at least one goal relates to at least one objective that relates to at least one area of indicated need?	EC 6 (Cols C & E) EC 7 (Col A)

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Questions to be Addressed	Related Questionnaire Items
2. What proportion meet the requirements of four informativeness/ internal consistency levels?	
a. What proportion are classified as incomplete information documents?	Various combinations of EC 1-16
b. What proportion are classified as minimally informative documents?	
c. What proportion are classified as informative and internally consistent documents?	
d. What proportion are classified as exceptionally informative and internally consistent documents?	
VII. In what service settings, and for what proportion of the academic week, do students receive special education services?	
1. What proportion of the students are served in, through, or on:	
a. A resource room?	SCQ 2a; DRF4 1a
b. A self-contained special education class?	SCQ 2b; DRF4 1b
c. A hospital program?	SCQ 2d; DRF4 1d
d. A homebound program?	SCQ 2e; DRF4 1e
e. The regular classroom (by specific academic and functional area)?	EC 7 (Col D); SCQ 2c; DRF4 1c
f. A pullout basis at one or more other schools?	DRF2 6a; SSLF 2; MRS I; DRF4 1
g. Various combinations of the above?	EC 7 (Col D); SCQ 2
2. What is the distribution of the number of hours per week that students are served in each of the settings listed in 1 above? For what percent of the week is the student assigned to special education?	SCQ 2 (Col D), EC 9
3. In what academic and functional areas is there specification of at least one objective to be met in the regular classroom?	EC 7 D

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Questions to be Addressed	Related Questionnaire Items
VIII. What are the characteristics of students who have IEPs and are enrolled in public schools, and of the schools and school districts in which they are enrolled?	
1. How are the students who receive special services distributed by:	
a. Selected school and school district characteristics (see VIII.3 and VIII.5 below)?	SCHQ and SIR 1
b. Age, grade level, race, and sex?	SCQ 1
c. Nature and severity of handicapping condition?	SCQ 3
d. Whether or not they have IEPs, and the status of incomplete IEPs?	DRF2 4
e. Whether or not their IEPs are available at their school of enrollment?	SCQ (marginal notation); DRF2 6.a & b
f. Source of service funding (94-142, 89-313, Title I, other)?	EC Funding Source; DRF2 5
g. Various combinations of the above?	SCQ 1, 3, and 4
2. What proportion of regular and special schools serve handicapped students?	School Data Sheets
3. How are the schools in which students are served distributed by:	
a. Whether or not they prepare IEPs?	SCHQ (marginal notations)
b. Whether or not IEPs are kept at the school?	SCHQ (marginal notations)
c. Grade level organization?	SIP
d. Size of student enrollment?	SIP
e. Percent of student enrollment qualifying for special education services?	SIP
f. Type of school (regular or special; day or residential)?	SCHQ 1
g. Resources available?	SCHQ 3; SDCQ 1, 2, and 3
h. Urban/suburban/rural location?	SCHQ 2

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Questions to be Addressed	Related Questionnaire Items
i. Whether or not they are members of special intermediate or cooperative districts for purposes of providing special education services?	SDCQ 3
j. Percent of handicapped students for which special education services are contracted by the school district to a private school or institution within and outside the geographic boundaries of the school district?	SDCQ 4 a & b
k. Various combinations of the above?	SCHQ 1, 2, and 3; SDCQ 1, 2, and 3
4. What proportion of school districts serve handicapped students?	School Data Sheets
5. How are the school districts in which students are served distributed by:	
a. Whether or not they prepare IEPs?	SDCQ (marginal notations)
b. Size of student enrollment?	SIP
c. Resources available?	SDCQ 1, 2, and 3
d. Number of intermediate districts or cooperative arrangements with other districts that have been established to serve the handicapped?	DRF1 2
e. Whether or not all their handicapped students are served through intermediate districts or cooperative arrangements with other schools?	DRF1 3
IX. How do the types, service settings, and amounts of special education services specified in IEPs vary by selected student and school characteristics?	
1. How do the answers to questions V and VII above vary by student age and/or grade levels, service setting, nature of student disability, and nature of parental and student participation in the IEP process?	EC 7 (Cols A & D), and 10; SCQ 1a & b, 2, 3, and 4
2. How do the answers to questions V and VII above vary by school type, school size, district size, resource availability levels, and urban/suburban/rural location?	EC 7 (Cols A & D), and 10; SCHQ 1, 2, and 3; SDCQ 1, 2, and 3; SIP 3.b

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Questions to be Addressed	Related Questionnaire Items
X. How do the formats, contents, properties, and development processes of IEPs vary by selected student, school, and school district characteristics?	
1. How do the answers to questions I-IV and VI above vary by student age and/or grade levels, service setting, and severity of student's handicapping condition?	EC 1-16; SCQ 1 a & b, 2 and 3
2. How do the answers to questions I-IV and VI above vary by school type, school size, district size, resource availability levels, and urban/suburban/rural location?	EC 1-16; SCHQ 1, 2, and 3; SDCQ 1, 2, and 3; SIP 3.b

Appendix B

Supporting Data for Chapter 2

Table B.1

NUMBER OF HANDICAPPED STUDENTS (AGES 3-21) SERVED IN LEA-ADMINISTERED SCHOOLS ON DECEMBER 1, 1978, AND PERCENT FOR WHOM AN IEP WAS PREPARED, BY SCHOOL CLASSIFICATION

(Standard errors are noted in parentheses)

School Classification (1)	Populations Served[a] (2)	Percent of "Served" Populations Having IEPs[b] (3)
Regular	2,873,839 (115,056)	95.1 (1.2)
Special	125,937 (21,119)	89.7 (7.5)
Total	2,999,776 (114,677)	94.9 (1.2)

[a] These student estimates are based on weighted school level data (school principal report), adjusted for nonresponse.

[b] Row percents in Column 3 are based on the estimated total number of students with IEPs, as shown in the corresponding rows of Column 2.

Table B.2

DISTRIBUTION OF STUDENTS WITH IEPs, BY FUNDING SOURCE AND SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Funding Source	School Type: Regular	School Type: Special	Total
P.L. 94-142	85.7 (1.8)	74.4 (5.7)	85.2 (1.9)
P.L. 89-313	2.1 (1.3)	12.3 (4.0)	2.5 (1.2)
Other[a]	9.9 (2.0)	11.1 (5.3)	10.0 (2.1)
Undetermined	2.3 (0.6)	2.3 (1.2)*	2.3 (0.6)
Total	100.0	100.0[b]	100.0

* Cell has estimated sample size of less than 25.

[a] Includes such sources as P.L. 197 and various state and local grants--none of which were applicable to at least one percent of the students.

[b] Detail does not add to total because of rounding.

Table B.3

DISTRIBUTION OF STUDENTS WITH IEPs, BY GRADE LEVEL AND SEX
(In percents, with standard errors noted in parentheses)

Grade Level	Sex		Total
	Male	Female	
Pre-K	0.8 (0.3)*	0.6 (0.2)*	1.4 (0.4)
K	2.1 (0.4)	1.8 (0.6)	3.9 (0.8)
1	6.3 (0.8)	2.9 (0.6)	9.2 (1.0)
2	6.9 (0.7)	3.9 (0.6)	10.8 (0.9)
3	5.8 (0.6)	3.6 (0.5)	9.4 (0.8)
4	5.5 (0.6)	3.0 (0.5)	8.6 (0.8)[a/]
5	4.7 (0.5)	3.1 (0.6)	7.7 (0 7)[a/]
6	3.9 (0.5)	2.3 (0.5)	6.2 (0.8)
7	4.2 (0.6)	2.6 (0.4)	6.9 (0.8)
8	4.5 (0.6)	1.9 (0.4)	6.4 (0.8)
9	4.3 (0.4)	1.7 (0.3)	6.0 (0.6)
10	3.1 (0.4)	1.8 (0.3)	4.9 (0.5)
11	2.0 (0.3)	0.8 (0.2)*	2.8 (0.4)
12	1.6 (0.3)	0.6 (0.1)*	2.2 (0.3)
Ungraded/ Undetermined	8.0 (0.9)	5.6 (0.9)	13.7 (1.6)[a/]
Total	63.7 (1.3)	36.3[a/] (1.3)	100.0[a/]

* Cell has estimated sample size of less than 25.

[a/] Detail does not add to total because of rounding.

Table B.4

DISTRIBUTION OF STUDENTS WITH IEPs, BY AGE
(In percents, with standard errors noted in parentheses)

Student Age	Percent
3 years old	0.4 (0.2)*
4 years old	0.7 (0.3)*
5 years old	2.6 (0.7)
6 years old	6.7 (0.7)
7 years old	8.8 (1.0)
8 years old	10.9 (0.9)
9 years old	9.1 (0.9)
10 years old	9.7 (0.7)
11 years old	9.4 (0.9)
12 years old	7.9 (0.9)
13 years old	7.3 (0.9)
14 years old	6.5 (0.7)
15 years old	6.7 (0.5)
16 years old	5.8 (0.6)
17 years old	3.6 (0.5)
18 years old	2.5 (0.3)
19 years old	0.8 (0.2)*
20 years old	0.3 (0.1)*
21 years old	0.2 (0.1)*
Total	100.0[a]

* Cell has estimated sample size of less than 25.

[a] Detail does not add to total because of rounding.

Table B.5

DISTRIBUTION OF STUDENTS WITH IEPs, BY AGE LEVEL AND SEX

(In percents, with standard errors noted in parentheses)

Age Levels	Sex		Total
	Male	Female	
3-5	1.8 (0.5)	1.8 (0.5)	3.7 (0.8)[a]
6-12	39.5 (1.5)	23.2 (1.4)	62.7 (1.7)
13-15	13.5 (1.0)	7.0 (0.7)	20.4 (1.4)[a]
16-21	8.9 (0.9)	4.3 (0.4)	13.2 (1.2)
Total	63.7 (1.3)	36.3 (1.3)	100.0

[a] Detail does not add to total because of rounding.

Table B.6

DISTRIBUTION OF STUDENTS WITH IEPs, BY RACE AND SEX

(In percents, with standard errors noted in parentheses)

Race	Sex		Total
	Male	Female	
White, Not Hispanic	48.2 (1.9)	26.3 (1.3)	74.6 (2.3)
Black, Not Hispanic	12.4 (1.7)	6.7 (0.9)	19.1 (2.3)
Hispanic	2.0 (0.5)	2.1 (0.4)	4.1 (0.6)
American Indian/Alaskan Native	0.8 (0.3)*	0.9 (0.4)*	1.7 (0.6)
Asian/Pacific Islander	0.2 (0.1)*	0.3 (0.1)*	0.5 (0.2)*
Total	63.7 (1.3)[a]	36.3 (1.3)	100.0

* Cell has estimated sample size of less than 25.

[a] Detail does not add to total because of rounding.

Table B.7

DISTRIBUTION OF STUDENTS WITH IEPs, BY NATURE OF HANDICAPPING CONDITION

(In percents, with standard errors noted in parentheses)

Nature of Condition	Percent[a/][b/]
Mentally Retarded	26.5 (1.8)
Learning Disabled	40.9 (1.7)
Emotionally Disturbed	8.5 (0.9)
Speech Impaired	32.9 (1.7)
Deaf and Hard of Hearing	2.9 (0.5)
Orthopedically Impaired	2.0 (0.5)
Visually Handicapped	1.5 (0.4)
Other Health Impaired	6.7 (1.1)

[a/] Detail does not add to total because of rounding.

[b/] Percents are based on the total number of students with IEPs. Percents total more than 100 because some students have more than one handicapping condition.

Table B.8

DISTRIBUTION OF STUDENTS WITH IEPs, BY NATURE AND SEVERITY OF HANDICAPPING CONDITION

(In percents, with standard errors noted in parentheses)

	Severity of Condition							
Nature of Condition	Mild		Moderate		Severe		Total	
Mentally Retarded	16.9	(1.5)	2.3	(0.5)	0.3	(0.1)*	19.6	(1.6)
Learning Disabled	13.4	(1.0)	13.8	(1.1)	3.1	(0.4)	30.3	(1.5)
Emotionally Disturbed	1.1	(0.3)	1.8	(0.3)	0.3	(0.1)*	3.3	(0.5)
Speech Impaired	13.0	(1.4)	8.5	(1.0)	2.3	(0.4)	23.8	(1.8)
Deaf and Hard of Hearing	0.1	(0.1)*	0.3	(0.1)*	0.6	(0.2)*	1.0	(0.3)
Visually Handicapped	0.0	(0.0)*	0.3	(0.2)*	0.3	(0.2)*	0.7	(0.3)*
Orthopedically Impaired	0.1	(0.1)*	0.3	(0.2)*	0.0	(0.0)*	0.4	(0.2)*
Other Health Impaired	2.2	(0.5)	1.5	(0.4)	0.6	(0.3)*	4.4	(0.9)
Multiple Conditions	3.9	(0.4)	7.0	(0.9)	5.5	(0.6)	16.5	(1.3)
Total	50.9[a/]	(1.6)	36.0[a/]	(1.5)	13.2[a/]	(1.0)	100.0[a/]	

* Cell has estimated sample size of less than 25.

[a/] Detail does not add to total because of rounding.

Table B.9

DISTRIBUTION OF STUDENTS WITH IEPs, BY NUMBER OF HANDICAPPING CONDITIONS AND TYPE OF SCHOOL

(In percents, with standard errors noted in parentheses)

Number of Handicapping Conditions	Type of School		Total
	Regular	Special	
1	81.0 (1.4)	2.4 (0.3)	83.4 (1.3)
2	11.9 (0.9)	1.0 (0.2)	12.9 (1.0)
3	2.2 (0.5)	0.4 (0.1)*	2.6 (0.5)
4 or more	0.9 (0.4)*	0.2 (0.0)*	1.1 (0.4)
Total	96.0 (0.4)	4.0 (0.4)	100.0

* Cell has estimated sample size of less than 25.

Table B.10

DISTRIBUTION OF STUDENTS WITH TWO HANDICAPPING CONDITIONS, BY TYPE OF COMBINATION AND TYPE OF SCHOOL

(In percents, with standard errors noted in parentheses)[a/]

Combinations	Type of School		Total
	Regular	Special	
Mentally Retarded and Speech Impaired	17.9 (2.9)	3.2 (0.9)*	21.1 (2.9)
Learning Disabled and Speech Impaired	21.8 (3.1)	0.0 (0.0)*	21.8 (3.1)
Learning Disabled and Emotionally Disturbed	21.3 (3.5)	0.6 (0.4)*	21.9 (3.5)
Mentally Retarded and Learning Disabled	8.3 (2.0)	0.9 (0.6)*	9.2 (2.1)
Other	22.7 (3.0)	3.3 (0.6)*	26.0 (3.1)
Total	92.1 (1.3)[b/]	7.9 (1.3)[b/]	100.0

* Cell has estimated sample size of less than 25.

[a/] Percents are based on an estimated 365,826 students with only two handicapping conditions.

[b/] Detail does not add to total because of rounding.

Table B.11

DISTRIBUTION OF STUDENTS WITH IEPs, BY NATURE OF HANDICAPPING CONDITION AND AGE LEVEL

(In percents, with standard errors noted in parentheses)

	Age Levels				
Nature of Condition	3-5	6-12	13-15	16-21	Total
Mentally Retarded	0.1 (0.0)*	8.7 (1.0)	5.7 (0.7)	5.1 (0.6)	19.6 (1.6)
Learning Disabled	0.3 (0.2)*	18.8 (1.2)	7.8 (0.8)	3.4 (0.5)	30.3 (1.5)
Emotionally Disturbed	0.0 (0.0)*	1.8 (0.3)	0.9 (0.2)*	0.5 (0.2)*	3.3 (0.5)
Speech Impaired	1.8 (0.5)	20.5 (1.7)	1.1 (0.2)	0.3 (0.1)*	23.8 (1.8)
Deaf and Hard of Hearing	0.1 (0.0)*	0.4 (0.2)*	0.3 (0.1)*	0.2 (0.1)*	1.0 (0.3)
Visually Handicapped	0.0 (0.0)*	0.3 (0.2)*	0.2 (0.1)*	0.2 (0.1)*	0.7 (0.3)*
Orthopedically Impaired	0.0 (0.0)*	0.3 (0.2)*	0.0 (0.0)*	0.1 (0.1)*	0.4 (0.2)*
Other Health Impaired	0.4 (0.3)*	2.5 (0.7)	0.8 (0.2)*	0.6 (0.2)*	4.4 (0.9)
Multiple Conditions	0.9 (0.3)*	9.2 (1.0)	3.6 (0.6)	2.8 (0.4)	16.5 (1.3)
Total	3.7 (0.8)[a/]	62.7 (1.7)[a/]	20.4 (1.4)	13.2 (1.2)	100.0

* Cell has estimated sample size of less than 25.

[a/] Detail does not add to total because of rounding.

Table B.12

DISTRIBUTION OF STUDENTS WITH IEPs, BY NATURE OF HANDICAPPING CONDITION AND SEX

(In percents, with standard errors noted in parentheses)

Nature of Condition	Sex		Total
	Male	Female	
Mentally Retarded	11.1 (1.1)	8.5 (0.9)	19.6 (1.6)
Learning Disabled	21.6 (1.2)	8.8 (0.8)	30.3 (1.5)
Emotionally Disturbed	2.6 (0.5)	0.7 (0.2)*	3.3 (0.5)
Speech Impaired	13.8 (1.3)	9.9 (1.1)	23.8 (1.8)
Deaf and Hard of Hearing	0.5 (0.2)*	0.5 (0.2)*	1.0 (0.3)
Visually Handicapped	0.5 (0.2)*	0.2 (0.1)*	0.7 (0.3)*
Orthopedically Impaired	0.3 (0.2)*	0.1 (0.1)*	0.4 (0.2)*
Other Health Impaired	2.7 (0.6)	1.6 (0.4)	4.4 (0.9)
Multiple Conditions	10.5 (0.9)	6.0 (0.7)	16.5 (1.3)
Total	63.7[a/] (1.3)	36.3 (1.3)	100.0

* Cell has estimated sample size of less than 25.

[a/] Detail does not add to total because of rounding.

Table B.13

DISTRIBUTION OF STUDENTS WITH IEPs, BY NATURE OF HANDICAPPING CONDITION AND RACE

(In percents, with standard errors noted in parentheses)

Nature of Condition	Race				Total
	White, Not Hispanic	Black, Not Hispanic	Hispanic	Other	
Mentally Retarded	11.7 (1.3)	6.6 (1.2)	0.4 (0.1)*	0.8 (0.4)*	19.6 (1.6)a/
Learning Disabled	24.4 (1.4)	4.5 (0.7)	1.0 (0.2)	0.5 (0.2)*	30.3 (1.5)a/
Emotionally Disturbed	2.5 (0.4)	0.5 (0.2)*	0.2 (0.1)*	0.1 (0.1)*	3.3 (0.5)
Speech Impaired	20.2 (1.6)	2.4 (0.6)	0.8 (0.3)*	0.4 (0.2)*	23.8 (1.8)
Deaf and Hard of Hearing	0.8 (0.2)*	0.2 (0.1)*	0.0 (0.0)*	0.0 (0.0)*	1.0 (0.3)
Visually Handicapped	0.3 (0.2)*	0.1 (0.1)*	0.3 (0.2)*	0.0 (0.0)*	0.7 (0.3)*
Orthopedically Impaired	0.3 (0.2)*	0.0 (0.0)*	0.1 (0.1)*	0.0 (0.0)*	0.4 (0.2)*
Other Health Impaired	2.1 (0.4)	1.2 (0.6)	0.6 (0.3)*	0.3 (0.2)*	4.4 (0.9)a/
Multiple Conditions	12.1 (1.0)	3.5 (0.8)	0.8 (0.3)*	0.1 (0.0)*	16.5 (1.3)
Total	74.6 (2.3)a/	19.1 (2.3)a/	4.1 (0.6)a/	2.2 (0.6)	100.0

* Cell has estimated sample size of less than 25.

a/ Detail does not add to total because of rounding.

Table B.14

DISTRIBUTION OF STUDENTS WITH IEPs, BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Nature of Condition	School Type	
	Regular	Special
Mentally Retarded	18.8 (1.7)	39.7 (4.8)
Learning Disabled	31.5 (1.5)	1.3 (0.6)*
Emotionally Disturbed	3.1 (0.5)	8.4 (3.6)
Speech Impaired	24.7 (1.9)	1.5 (1.4)*
Deaf and Hard of Hearing	0.9 (0.3)*	3.7 (2.4)*
Visually Handicapped	0.6 (0.3)*	2.2 (0.9)*
Orthopedically Impaired	0.4 (0.2)*	0.8 (0.5)*
Other Health Impaired	4.5 (0.9)	2.1 (1.4)*
Multiple Conditions	15.6 (1.3)	40.2 (3.9)
Total	100.0[a]	100.0[a]

* Cell has estimated sample size of less than 25.

[a] Detail does not add to total because of rounding.

Table B.15

DISTRIBUTION OF STUDENTS WITH IEPs, BY SCHOOL TYPE AND SEVERITY OF HANDICAP

(In percents, with standard errors noted in parentheses)

Severity	School Type	
	Regular	Special
Mild	52.2 (1.6)	17.8 (3.8)
Moderate	35.3 (1.5)	53.2 (4.3)
Severe	12.5 (1.0)	29.1 (3.9)
Total	100.0	100.0[a]

[a] Detail does not add to total because of rounding.

Table B.16

DISTRIBUTION OF SCHOOLS SERVING HANDICAPPED STUDENTS, BY SCHOOL TYPE AND GRADE/AGE-LEVEL ORGANIZATION

(In percents, with standard errors noted in parentheses)

Grade-Level Organization	School Type		Total
	Regular	Special	
Elementary	82.6 (2.2)	0.3 (0.1)	82.9 (2.2)
Secondary	13.8 (1.9)	0.1 (0.0)	13.9 (1.9)
Elementary/Secondary	1.9 (1.1)	1.3 (0.2)	3.1 (1.2)[a]
Total	98.3 (0.2)	1.7 (0.2)	100.0[a]

[a] Detail does not add to total because of rounding.

Table B.17

DISTRIBUTION OF STUDENTS WITH IEPs, BY SCHOOL TYPE AND GRADE/AGE-LEVEL ORGANIZATION

(In percents, with standard errors noted in parentheses)

Grade-Level Organization	School Type		Total
	Regular	Special	
Elementary	82.6 (1.5)	0.6 (0.3)*	83.2 (1.5)
Secondary	12.0 (1.3)	0.3 (0.1)*	12.3 (1.3)
Elementary/Secondary	1.5 (0.6)	3.1 (0.4)	4.5 (0.8)[a]
Total	96.0[a] (0.4)	4.0 (0.4)	100.0

* Cell has estimated sample size of less than 25.

[a] Detail does not add to total because of rounding.

Table B.18

DISTRIBUTION OF STUDENTS WITH IEPs, BY STUDENT RACE AND SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Race	School Type		Total
	Regular	Special	
White, Not Hispanic	72.2 (2.2)	2.4 (0.3)	74.6 (2.3)
Black, Not Hispanic	17.7 (2.3)	1.4 (0.3)	19.1 (2.3)
Hispanic	4.0 (0.6)	0.1 (0.1)*	4.1 (0.6)
Other[a]	2.1 (0.6)	0.1 (0.0)*	2.2 (0.6)
Total	96.0 (0.4)	4.0 (0.4)	100.0

* Cell has estimated sample size of less than 25.

[a] American Indian or Alaskan Native and Asian or Pacific Islander.

Table B.19

DISTRIBUTION OF STUDENTS WITH IEPs, BY AGE LEVEL AND TYPE OF SCHOOL

(In percents, with standard errors noted in parentheses)

Age Level	School Type		Total
	Regular	Special	
3-5	3.4 (0.8)	0.3 (0.1)*	3.7 (0.8)
6-12	60.9 (1.7)	1.7 (0.3)	62.7 (1.7)[a/]
13-15	19.5 (1.4)	1.0 (0.2)	20.4 (1.4)[a/]
16-21	11.8 (1.2)	1.4 (0.2)	13.2 (1.2)
Total	96.0[a/] (0.4)	4.0[a/] (0.4)	100.0

* Cell has estimated sample size of less than 25.

[a/] Detail does not add to total because of rounding.

Table B.20

DISTRIBUTION OF STUDENTS WITH IEPs, BY SEX AND SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Sex	School Type		Total
	Regular	Special	
Male	61.3 (1.3)	2.4 (0.3)	63.7 (1.3)
Female	34.8 (1.3)	1.5 (0.2)	36.3 (1.3)
Total	96.0[a/] (0.4)	4.0[a/] (0.4)	100.0

[a/] Detail does not add to total because of rounding.

Table B.21

DISTRIBUTION OF SCHOOLS SERVING HANDICAPPED STUDENTS, BY SCHOOL SIZE AND TYPE-OF-COMMUNITY LOCATION

(In percents, with standard errors noted in parentheses)

Type of Community	School Size Small	 Medium	 Large	Total
Rural	23.8 (3.3)	8.7 (2.1)	1.6 (0.6)	34.0 (3.2)[a]
Small City	11.0 (2.2)	12.3 (1.7)	3.3 (0.7)	26.6 (3.0)
Urban	6.3 (1.5)	11.8 (1.2)	3.0 (0.6)	21.1 (2.1)
Suburban	5.6 (1.7)	10.1 (1.5)	2.6 (0.6)	18.3 (2.1)
Total	46.6[a] (3.2)	42.9 (3.0)	10.4[a] (1.1)	100.0[a]

[a] Detail does not add to total because of rounding.

Table B.22

DISTRIBUTION OF STUDENTS WITH IEPs, BY SCHOOL SIZE AND TYPE-OF-COMMUNITY LOCATION

(In percents, with standard errors noted in parentheses)

Type of Community	School Size Small	 Medium	 Large	Total
Rural	12.5 (2.0)	7.0 (1.6)	1.6 (0.5)	21.1 (2.5)
Small City	6.7 (1.3)	15.8 (2.2)	5.2 (1.3)	27.8 (2.9)
Urban	5.9 (1.2)	16.8 (1.9)	6.6 (1.6)	29.3 (2.7)
Suburban	4.1 (1.2)	13.5 (2.0)	4.2 (1.1)	21.8 (2.5)
Total	29.2 (2.6)	53.1 (2.7)	17.7 (2.1)[a]	100.0

[a] Detail does not add to total because of rounding.

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Table B.23

DISTRIBUTION OF REGULAR SCHOOLS SERVING HANDICAPPED CHILDREN, BY SIZE OF TOTAL ENROLLMENT AND PROPORTION OF ENROLLEES WHO ARE HANDICAPPED

(In percents, with standard errors noted in parentheses)

Proportion of Enrollees Who Are Handicapped	School Size			Total
	Small	Medium	Large	
Low	16.7 (2.8)	13.3 (2.0)	5.8 (0.8)	35.8 (3.0)
Medium	11.1 (2.1)	17.8 (2.2)	3.7 (0.9)	32.7 (3.0)[a]
High	18.4 (2.8)	12.1 (1.6)	1.0 (0.4)	31.5 (3.0)
Total	46.2 (3.2)	43.2 (3.0)	10.6 (1.1)[a]	100.0

[a] Detail does not add to total because of rounding.

Table B.24

DISTRIBUTION OF REGULAR SCHOOLS SERVING HANDICAPPED CHILDREN, BY TYPE-OF-COMMUNITY LOCATION AND PROPORTION OF ENROLLEES WHO ARE HANDICAPPED

(In percents, with standard errors noted in parentheses)

Proportion of Enrollees Who Are Handicapped	Type of Community				Total
	Rural	Small City	Urban	Suburban	
Low	13.6 (2.4)	9.9 (1.8)	5.9 (1.5)	6.4 (1.3)	35.8 (3.0)
Medium	9.3 (2.2)	9.9 (1.8)	6.5 (1.4)	7.1 (1.5)	32.7 (3.0)[a]
High	11.5 (2.5)	7.0 (1.5)	8.1 (1.4)	4.8 (1.2)	31.5 (3.0)[a]
Total	34.4 (3.3)	26.8 (3.1)	20.5 (2.1)	18.3 (2.1)	100.0

[a] Detail does not add to total because of rounding.

Table B.25

DISTRIBUTION OF SCHOOLS SENDING STUDENTS TO OTHER SCHOOLS FOR SPECIAL EDUCATION, BY SCHOOL LOCATION

(In percents, with standard errors noted in parentheses)

Type-of-Community Location	Percent[a]
Rural	47.4 (9.0)
Small City	22.7 (6.6)
Urban	16.7 (5.8)
Suburban	13.2 (3.9)
Total	100.0

[a] Percents are based on an estimated 6,184 sending schools.

Table B.26

DISTRIBUTION OF SCHOOL DISTRICTS, BY DISTRICT ENROLLMENT SIZE AND PER-PUPIL EXPENDITURE LEVEL

(In percents, with standard errors noted in parentheses)

Per-Pupil Expenditure Level	Enrollment Size			Total
	Small	Medium	Large	
Low	29.2 (5.9)	5.5 (1.1)	1.0 (0.4)	35.8 (5.8)
Medium	32.6 (5.1)	8.3 (1.4)	2.5 (0.4)	43.5 (5.5)
High	15.1 (3.9)	3.6 (0.8)	1.7 (0.3)	20.4 (4.0)
Undetermined	0.0 (0.0)	0.3 (0.3)	0.0 (0.0)	0.3 (0.3)
Total	76.9 (1.5)	17.7 (1.2)	5.3 (0.5)[a]	100.0[a]

[a] Detail does not add to totals because of rounding.

Table B.27

DISTRIBUTION OF STUDENTS WITH IEPs, BY DISTRICT PER-PUPIL EXPENDITURE LEVEL AND ENROLLMENT SIZE

(In percents, with standard errors noted in parentheses)

Per-Pupil Expenditure Level	Enrollment Size			Total
	Small	Medium	Large	
Low	8.4 (1.3)	8.5 (1.7)	7.7 (2.3)	24.6 (3.1)
Medium	9.7 (1.8)	15.2 (2.4)	18.9 (3.0)	43.8 (4.1)
High	5.1 (1.5)	5.4 (1.4)	20.4 (3.2)	30.9 (3.6)
Undetermined	0.0 (0.0)*	0.5 (0.5)*	0.1 (0.1)*	0.6 (0.5)*
Total	23.3 (1.6)[a]	29.6 (1.7)	47.1 (2.1)	100.0[a]

* Cell has estimated sample size of less than 25.

[a] Detail does not add to total because of rounding.

Table B.28

DISTRIBUTION OF SCHOOL DISTRICTS THAT DO/DO NOT ADMINISTER SPECIAL SCHOOLS, BY DISTRICT ENROLLMENT SIZE

(In percents, with standard errors noted in parentheses)

Enrollment Size	Districts Administer Special Schools?	
	Yes	No
Small	1.7 (1.2)	75.3 (2.0)
Medium	1.9 (0.6)	15.9 (1.2)
Large	3.2 (0.4)	2.1 (0.3)
Total	6.8 (1.4)	93.2 (1.4)[a]

[a] Detail does not add to total because of rounding.

Table B.29

DISTRIBUTION OF STUDENTS WITH IEPs WHO ARE ENROLLED IN DISTRICTS THAT DO/DO NOT ADMINISTER SPECIAL SCHOOLS, BY DISTRICT ENROLLMENT SIZE

(In percents, with standard errors noted in parentheses)

Enrollment Size	Districts Administer Special Schools?	
	Yes	No
Small	0.8 (0.6)*	22.4 (1.7)
Medium	4.4 (1.2)	25.1 (1.8)
Large	37.2 (2.4)	10.0 (1.7)
Total	42.5 (2.5)[a/]	57.5 (2.5)

* Cell has estimated sample size of less than 25.

[a/] Detail does not add to total because of rounding.

Table B.30

DISTRIBUTION OF SCHOOL DISTRICTS, BY DISTRICT ENROLLMENT SIZE AND PROPORTION OF STUDENTS SERVED THROUGH COOPERATIVE/ INTERMEDIATE DISTRICTS

(In percents, with standard errors noted in parentheses)

Percent (P) of Students Served	Enrollment Size			Total
	Small	Medium	Large	
$P = 0$	15.8 (5.0)	6.8 (0.9)	2.1 (0.5)	24.7 (5.2)
$0 < P \leq 10$	9.3 (3.4)	3.5 (1.0)	1.7 (0.4)	14.5 (3.6)
$10 < P \leq 25$	1.1 (0.8)	1.5 (0.8)	0.5 (0.2)	3.1 (1.1)
$25 < P \leq 50$	4.2 (2.8)	0.6 (0.4)	0.0 (0.0)	4.8 (2.8)
$50 < P \leq 100$	3.1 (2.2)	1.3 (0.6)	0.0 (0.0)	4.4 (2.3)
$P = 100$	38.5 (5.7)	3.4 (1.1)	0.7 (0.2)	42.7 (5.7)[a/]
Undetermined	4.9 (2.3)	0.6 (0.4)	0.3 (0.2)	5.8 (2.3)
Total	76.9 (1.5)	17.7 (1.2)	5.3 (0.5)	100.0[a/]

[a/] Detail does not add to total because of rounding.

Table B.31

DISTRIBUTION OF SCHOOL DISTRICTS THAT SERVE HANDICAPPED STUDENTS THROUGH COOPERATIVE/INTERMEDIATE DISTRICTS, BY SCHOOL DISTRICT ENROLLMENT SIZE AND PER-PUPIL EXPENDITURE LEVEL

(In percents, with standard errors noted in parentheses)

Per-Pupil Expenditure Level	Enrollment Size			Total
	Small	Medium	Large	
Low	31.3 (8.0)	3.2 (1.2)	0.7 (0.3)	35.2 (7.9)
Medium	33.4 (7.2)	7.9 (1.7)	2.1 (0.5)	43.3 (7.5)[a]
High	16.5 (4.5)	3.1 (0.9)	1.5 (0.4)	21.0 (4.7)[a]
Undetermined	0.0 (0.0)	0.4 (0.4)	0.0 (0.0)	0.4 (0.4)
Total	81.2 (2.2)	14.6 (1.8)	4.2 (0.7)[a]	100.0[a]

[a] Detail does not add to total because of rounding.

Table B.32

DISTRIBUTION OF SCHOOL DISTRICTS, BY SCHOOL DISTRICT PER-PUPIL EXPENDITURE LEVEL AND PROPORTION OF STUDENTS SERVED THROUGH COOPERATIVE/INTERMEDIATE DISTRICTS

(In percents, with standard errors noted in parentheses)

Percent (P) of Students Served	Per-Pupil Expenditure Level				Total
	Low	Medium	High	Undetermined	
$P = 0$	9.3 (2.3)	10.9 (4.0)	4.6 (2.3)	0.0 (0.0)	24.7 (5.2)[a]
$0 < P \leq 10$	1.3 (0.6)	9.3 (3.6)	4.0 (1.4)	0.0 (0.0)	14.5 (3.6)[a]
$10 < P \leq 25$	0.6 (0.6)	1.6 (0.9)	0.5 (0.3)	0.3 (0.3)	3.1 (1.1)[a]
$25 < P \leq 50$	1.3 (1.0)	3.3 (2.7)	0.2 (0.2)	0.0 (0.0)	4.8 (2.8)
$50 < P \leq 100$	2.4 (2.0)	1.5 (1.1)	0.5 (0.4)	0.0 (0.0)	4.4 (2.3)
$P = 100$	20.2 (6.3)	15.2 (5.1)	7.2 (2.9)	0.0 (0.0)	42.7 (5.7)[a]
Undetermined	0.6 (0.5)	1.7 (1.1)	3.5 (2.1)	0.0 (0.0)	5.8 (2.3)
Total	35.8[a] (5.8)	43.5 (5.5)	20.4[a] (4.0)	0.3 (0.3)	100.0

[a] Detail does not add to total because of rounding.

Table B.33

DISTRIBUTION OF SCHOOL DISTRICTS THAT CONTRACT FOR THE PROVISION OF SPECIAL EDUCATION SERVICES, BY PROPORTION OF STUDENTS RECEIVING CONTRACTED SERVICES

(In percents, with standard errors noted in parentheses)

Students Served	Percent Districts	Cumulative Percent
$0 < P < 1$	16.4 (3.9)	16.4
$1 \leq P < 2$	12.2 (4.2)	28.6
$2 \leq P < 3$	18.2 (7.8)	46.8
$3 \leq P < 4$	8.2 (3.2)	55.0
$4 \leq P < 5$	2.4 (1.2)	57.4
$5 \leq P < 7$	14.6 (7.2)	72.0
$7 \leq P < 9$	14.1 (7.0)	86.1
$9 \leq P < 11$	4.7 (3.4)	90.8
$11 \leq P < 15$	1.7 (1.0)	92.5
$15 \leq P < 20$	1.1 (0.8)	93.6
$20 \leq P < 22$	1.0 (1.0)	94.6
$P \geq 22$	0.0 (0.0)	94.6
Undetermined	5.5 (4.3)	100.1[a]
Total	100.0[a]	

[a] Detail does not add to total because of rounding.

Table B.34

DISTRIBUTION OF SCHOOL DISTRICTS CONTRACTING THE PROVISION OF SPECIAL SERVICES TO PRIVATE SCHOOLS OR INSTITUTIONS, BY SCHOOL DISTRICT PER-PUPIL EXPENDITURE LEVEL AND ENROLLMENT SIZE

(In percents, with standard errors noted in parentheses)

Per-Pupil Expenditure Level	Enrollment Size			Total
	Small	Medium	Large	
Low	16.6 (8.1)	9.0 (2.8)	2.2 (0.9)	27.7 (8.2)[a]
Medium	23.8 (8.2)	15.0 (3.2)	3.7 (1.0)	42.4 (7.8)[a]
High	18.4 (6.8)	8.3 (2.1)	3.1 (0.7)	29.8 (7.3)
Undetermined	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Total	58.8 (5.8)	32.3 (4.8)	8.9 (1.6)[a]	100.0[a]

[a] Detail does not add to total because of rounding.

Appendix C

Supporting Data for Chapter 3

Table C.1

DISTRIBUTION OF IEPs, BY NUMBER OF PAGES AND STUDENT AGE LEVEL
(In percents, with standard errors noted in parentheses)

Number of Pages	Student Age Levels				Total Ages 3-21
	3-5	6-12	13-15	16-21	
1	8.2 (4.0)*	6.2 (1.2)	5.6 (1.6)	5.0 (1.8)	6.0 (1.0)
2	31.2 (6.7)*	25.3 (2.3)	21.8 (3.0)	17.6 (2.9)	23.7 (2.0)
3	15.6 (6.0)*	16.0 (1.8)	14.3 (2.5)	18.0 (2.6)	16.0 (1.5)
4	11.1 (5.8)*	14.9 (1.5)	13.3 (2.0)	12.0 (2.1)	14.1 (1.1)
5	5.1 (2.9)*	11.8 (1.5)	15.7 (2.5)	12.3 (2.2)	12.4 (1.4)
6	3.6 (3.3)*	6.9 (1.0)	7.5 (1.2)	9.3 (1.6)	7.2 (0.7)
7-10	16.8 (5.6)*	12.3 (1.1)	12.4 (1.9)	18.0 (2.6)	13.2 (1.0)
11 or greater	8.6 (2.4)*	6.6 (1.3)	9.3 (2.0)	7.8 (1.4)	7.3 (1.1)
Total	100.0[a/]	100.0	100.0[a/]	100.0	100.0[a/]
Mean Number Of Pages	5.0 (1.0)	4.7 (0.2)	5.1 (0.3)	5.2 (0.3)	4.8 (0.2)
Standard Deviation Of Population	4.9	4.0	3.9	3.9	4.0
Range of Number Of Pages	1-26	1-41	1-39	1-47	1-47

* Cell has an estimated sample size of less than 25.

[a/] Details do not add to totals because of rounding.

Table C.2

DISTRIBUTION OF IEPs, BY NUMBER OF PAGES AND SEVERITY OF STUDENT HANDICAP

(In percents, with standard errors noted in parentheses)

Number of Pages	Severity of Handicapping Condition		
	Mild	Moderate	Severe
1	4.8 (1.0)	7.5 (1.5)	6.4 (1.8)
2	24.4 (2.7)	23.9 (2.1)	21.0 (3.4)
3	16.7 (2.0)	16.5 (2.2)	12.0 (2.7)
4	15.2 (1.7)	12.3 (1.4)	15.0 (2.4)
5	13.4 (1.7)	12.2 (1.7)	9.0 (1.9)
6	6.2 (1.0)	6.7 (1.2)	12.4 (2.8)
7-10	12.5 1.2)	13.6 (1.9)	14.7 (2.4)
11 or greater	6.9 (1.5)	7.2 (1.2)	9.4 (2.7)
Total	100.0[a]	100.0[a]	100.0[a]
Mean Number Of Pages	4.8 (0.2)	4.8 (0.2)	5.2 (0.3)
Standard Deviation Of Population	4.0	4.1	4.1
Range of Number of Pages	1-41	1-39	1-47

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[a] Details do not add to total because of rounding.

Table C.3

DISTRIBUTION OF IEPs, BY NUMBER OF PAGES AND SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Number Of Pages	School Type		Total All Schools
	Regular	Special	
1	6.2 (1.1)	1.5 (1.1)*	6.0 (1.0)
2	24.0 (2.0)	17.5 (4.9)	23.7 (2.0)
3	16.3 (1.6)	11.6 (3.0)	16.0 (1.5)
4	14.1 (1.2)	13.3 (4.0)	14.1 (1.1)
5	12.5 (1.4)	8.4 (1.7)	12.4 (1.4)
6	7.2 (0.7)	6.8 (2.1)	7.2 (0.7)
7-10	12.8 (1.0)	22.3 (4.3)	13.2 (1.0)
11 or greater	6.8 (1.2)	18.6 (3.7)	7.3 (1.1)
Total	100.0[a]	100.0	100.0[a]
Mean Number Of Pages	4.7 (0.2)	7.0 (0.6)	4.8 (0.2)
Standard Deviation Of Population	3.9	5.9	4.0
Range of Number of Pages	1-41	1-47	1-47

* Cell has an estimated sample size of less than 25.

[a] Details do not add to total because of rounding.

Table C.4

DISTRIBUTION OF IEPs, BY NUMBER OF PAGES
AND SCHOOL DISTRICT SIZE
(In percents, with standard errors noted in parentheses)

Number of Pages	School District Size		
	Small	Medium	Large
1	4.8 (1.7)	5.7 (1.1)	6.7 (1.9)
2	31.6 (4.5)	23.4 (3.7)	20.1 (2.5)
3	17.5 (4.1)	13.2 (2.6)	17.1 (1.8)
4	12.6 (2.7)	14.6 (1.8)	14.5 (1.6)
5	11.1 (2.7)	15.4 (2.9)	11.0 (1.8)
6	5.9 (1.1)	6.7 (1.2)	8.2 (1.1)
7-10	10.7 (2.2)	15.4 (1.7)	13.1 (1.5)
11 or greater	5.8 (1.8)	5.6 (1.4)	9.2 (2.0)
Total	100.0	100.0	100.0[a]
Mean Number Of Pages	4.3 (0.3)	4.9 (0.3)	5.1 (0.3)
Standard Deviation Of Population	3.5	4.1	4.2
Range of Number of Pages	1-39	1-41	1-47

[a] Details do not total because of rounding.

Table C.5

DISTRIBUTION OF IEPs, BY NUMBER OF PAGES AND SCHOOL DISTRICT PER-PUPIL EXPENDITURE LEVEL

(In percents, with standard errors noted in parentheses)

Number of Pages	School District Per-Pupil Expenditure Level[a]		
	Low	Medium	High
1	6.4 (2.2)	5.4 (1.4)	6.0 (1.9)
2	32.3 (3.9)	20.5 (2.8)	21.0 (3.6)
3	14.5 (3.3)	16.8 (2.3)	16.4 (2.4)
4	12.8 (2.0)	16.5 (2.3)	12.1 (1.8)
5	8.4 (2.2)	13.5 (2.4)	14.1 (2.5)
6	5.3 (1.0)	7.3 (1.1)	8.7 (1.4)
7-10	11.0 (1.3)	13.3 (1.8)	14.9 (2.1)
11 or greater	9.4 (3.4)	6.6 (1.9)	6.9 (1.5)
Total	100.0[b]	100.0[b]	100.0[b]
Mean Number Of Pages	4.8 (0.5)	4.8 (0.3)	4.9 (0.3)
Standard Deviation Of Population	4.9	3.6	3.9
Range of Number of Pages	1-41	1-39	1-47

[a] These estimates are based on the sample of 206 districts for which per-pupil expenditure data were available--these data were not available for 2 districts.

[b] Details do not total because of rounding.

Table C.6

AVERAGE NUMBER OF PAGES IN IEPs, BY CATEGORY OF LEGIBILITY

Category of Legibility	Number of Pages		
	Mean	Standard Deviation Of Population	Standard Error Of Mean
1. IEP Typed and Legible	5.0	4.2	0.4
2. IEP Handwritten, But Easy to Read	4.8	3.8	0.2
3. IEP Handwritten, and Difficult To Read	7.7	10.2	2.3

Table C.7

DISTRIBUTION OF IEPs WITH HEADINGS FOR VARIOUS MANDATED INFORMATION AREAS
(Standard errors are noted in parentheses)

Information Headings[a]	Percent IEPs With Heading
Statement of annual goals.	94.5 (1.3)
Short-term objectives.	91.7 (1.4)
Statement of the present level of educational performance.	89.7 (1.9)
Projected date for initiation of specific services.	88.7 (1.9)
Statement of specific educational services to be provided.	80.9 (2.7)
Anticipated duration of specific services.	80.2 (2.8)
Statement of the extent to which child will be able to participate in regular educational programs.	76.6 (3.1)
Proposed evaluation criteria.	53.2 (3.2)
Proposed evaluation procedures.	39.7 (3.6)
Proposed schedules for determining whether instructional objectives are being met.	27.5 (3.3)

[a] A heading for "assurances of at least an annual evaluation" was not expected to be found in IEPs and therefore is not included.

Table C.8

DISTRIBUTION OF IEPs WITH HEADINGS FOR VARIOUS NON-MANDATED INFORMATION AREAS

(Standard errors are noted in parentheses)

Information Headings	Percent IEPs With Heading
A. BASIC STUDENT CHARACTERISTICS	
Student's age or birthdate.	82.2 (2.4)
Student's grade level.	58.9 (3.5)
Nature of student's handicap.	26.6 (3.6)
Student's sex.	13.4 (3.0)
Student's race.	6.7 (2.2)
B. ASSESSMENT-RELATED	
Assessment data to support present level of performance.	36.4 (3.3)
Date of the assessment of present level of performance.	23.0 (2.7)
Student's strengths.	23.3 (2.9)
Physical education needs.	12.1 (2.3)
C. PLACEMENT-RELATED	
Placement recommendation.	65.5 (3.5)
Rationale for placement or services.	22.3 (2.7)
D. INSTRUCTION-RELATED	
Student's primary language.	6.0 (2.6)
Student's school attendance record.	3.1 (1.2)
Student's special interests.	1.9 (1.0)
E. PROCESS OF IEP DEVELOPMENT, APPROVAL, AND REVIEW	
Participants in the IEP process.	87.0 (2.3)
Date of preparation of IEP.	83.7 (2.2)
Titles of individuals who approved the IEP.	75.6 (2.7)
Parental approval.	73.6 (2.9)
Signature of individuals who approved the IEP.	61.4 (3.3)
Proposed IEP review date.	48.8 (3.9)
Results of parental notification.	9.6 (1.9)
Actual IEP review date.	8.3 (1.6)
Results of IEP review.	8.0 (1.7)
Participants in IEP review.	6.8 (1.4)
F. PROPOSED PROGRAM OF SPECIAL SERVICES	
Personnel responsible for services.	67.2 (3.3)
Recommended instructional materials, resources, strategies, or techniques.	59.5 (3.2)
Date short-term objectives met.	23.0 (3.0)
Priority listing of annual goals.	17.0 (2.4)
G. OTHER	
Other.[a]	37.8 (3.5)

[a] IEPs with at least one "other" heading. Includes such headings as: date of referral, provisions for mainstreaming, or last grade obtained.

Table C.9

DISTRIBUTION OF IEPs WITH HEADINGS FOR VARIOUS MANDATED INFORMATION AREAS, BY SCHOOL TYPE

(Standard errors are noted in parentheses)

Information Headings[a]	Percent of Students with IEPs That Include Heading:[b]	
	Regular Schools	Special Schools
Statement of annual goals.	94.4 (1.3)	97.0 (1.3)
Short-term objectives.	91.6 (1.4)	93.2 (2.9)
Statement of the present level of educational performance.	89.5 (2.0)	94.3 (2.1)
Projected date for initiation of specific services.	88.5 (2.0)	93.0 (2.6)
Statement of specific educational services to be provided.	80.5 (2.7)	90.6 (2.9)
Anticipated duration of specific services.	79.8 (2.8)	88.4 (4.1)
Statement of the extent to which child will be able to participate in regular educational programs.	76.4 (3.1)	79.6 (4.7)
Proposed evaluation criteria.	53.6 (3.2)	46.3 (7.3)
Proposed evaluation procedures.	39.5 (3.6)	44.7 (7.6)
Proposed schedules for determining whether instructional objectives are being met.	27.4 (3.3)	29.4 (7.1)

[a] A heading for "assurances of at least an annual evaluation" was not expected to be found in IEPs and therefore is not included.

[b] Percents are based on column estimated population totals, adjusted for nonresponse.

Table C.10

DISTRIBUTION OF IEPs WITH HEADINGS FOR VARIOUS NON-MANDATED INFORMATION AREAS, BY SCHOOL TYPE

(Standard errors are noted in parentheses)

Information Headings	Percent of Students with IEPs That Include Heading:[b/]	
	Regular Schools	Special Schools
A. BASIC STUDENT CHARACTERISTICS		
Student's age or birthdate.	81.6 (2.5)	94.3 (2.6)
Student's grade level.	59.1 (3.5)	55.9 (8.4)
Nature of student's handicap.	26.6 (3.5)	25.0 (6.0)
Student's sex.	13.4 (3.0)	13.2 (5.0)
Student's race.	6.6 (2.2)	9.5 (4.0)
B. ASSESSMENT-RELATED		
Assessment data to support present level of performance.	36.2 (3.3)	39.8 (8.0)
Date of the assessment of present level of performance.	22.9 (2.7)	26.6 (8.0)
Student's strengths.	23.2 (3.0)	26.0 (8.0)
Physical education needs.	11.9 (2.3)	16.2 (5.2)
C. PLACEMENT-RELATED		
Placement recommendation.	65.0 (3.5)	77.9 (6.0)
Rationale for placement or services.	22.2 (2.8)	24.0 (5.2)
D. INSTRUCTION-RELATED		
Student's primary language.	5.9 (2.6)	8.1 (4.2)
Student's school attendance record.	2.8 (1.1)	7.7 (4.5)
Student's special interests.	1.9 (1.0)	1.7 (1.2)*
E. PROCESS OF IEP DEVELOPMENT, APPROVAL, AND REVIEW		
Participants in the IEP process.	86.7 (2.3)	92.3 (2.2)
Date of preparation of IEP.	83.2 (2.3)	92.6 (2.4)
Titles of individuals who approved the IEP.	75.1 (2.8)	85.2 (3.6)
Parental approval.	73.5 (3.0)	76.5 (7.2)
Signature of individuals who approved the IEP.	62.0 (3.4)	49.7 (8.0)
Proposed IEP review date.	47.9 (4.0)	68.6 (5.5)
Results of parental notification.	9.5 (1.9)	12.1 (4.3)
Actual IEP review date.	8.5 (1.6)	5.2 (2.5)
Results of IEP review.	8.1 (1.8)	6.9 (3.8)
Participants in IEP review.	6.8 (1.4)	5.4 (2.6)
F. PROPOSED PROGRAM OF SPECIAL SERVICES		
Personnel responsible for services.	67.1 (3.3)	71.3 (5.2)
Recommended instructional materials, resources, strategies, or techniques.	59.7 (3.2)	55.8 (7.6)
Date short-term objectives met.	22.8 (3.1)	26.1 (6.0)
Priority listing of annual goals.	17.1 (2.5)	13.9 (3.6)
G. OTHER		
Other.[a/]	37.6 (3.5)	40.4 (7.8)

* Cell has an estimated sample size of less than 25.

[a/] IEPs with at least one "other" heading. Includes such headings as: date of referral, provisions for mainstreaming, or last grade obtained.

[b/] Percents are based on column estimated population totals, adjusted for nonresponse.

Table C.11

DISTRIBUTION OF IEPs WITH FORMATS WHICH LIMIT NUMBER OF ANNUAL GOALS OR NUMBER OF SHORT-TERM OBJECTIVES, BY AGE LEVEL

(In percents, with standard errors noted in parentheses)

Formats Which Limit The:	Student Age Levels[a/]				Total Ages 3-21
	3-5	6-12	13-15	16-21	
1. Number Of Annual Goals	78.2 (8.3)	64.8 (3.5)	63.3 (3.9)	63.4 (4.7)	64.8 (3.1)
2. Number Of Short-Term Objectives	53.3(10.6)	38.1 (3.3)	37.6 (4.0)	40.8 (5.2)	38.8 (3.2)

[a/] Percents are based on column estimated population totals, adjusted for nonresponse.

Table C.12

DISTRIBUTION OF IEPs WITH FORMATS WHICH LIMIT THE NUMBER OF ANNUAL GOALS OR THE NUMBER OF SHORT-TERM OBJECTIVES, BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Formats Which Limit The:	School Type[a/]		Total All Schools
	Regular	Special	
1. Number Of Annual Goals	65.0 (3.2)	61.0 (7.8)	64.8 (3.1)
2. Number Of Short-Term Objectives	39.3 (3.3)	28.5 (5.8)	38.8 (3.2)

[a/] Percents are based on column estimated population totals, adjusted for nonresponse.

Table C.13

DISTRIBUTION OF IEPs WITH FORMATS RELATED TO PARENTAL APPROVAL
(Standard errors are noted in parentheses)

Format Classifications	Percent of IEPs
Approval (or disapproval) would be for the entire IEP.	48.3 (3.1)
Approval (or disapproval) would be for annual goals but not for short-term objectives.	11.8 (1.8)
Approval (or disapproval) would be for part but not all of the short-term objectives.	4.8 (1.1)
Approval (or disapproval) would be for services to be provided but not for annual goals or short-term objectives.	11.2 (2.1)
Approval (or disapproval) would be for some portion of the IEP, but cannot determine what would be approved.	2.0 (0.5)
No place for approval or disapproval is provided.	21.9 (2.5)
Total	100.0

Appendix D

Supporting Data for Chapter 4

Appendix D

Supporting Data for Chapter 4

Criteria for Determining the Occurrence of Mandated Information in IEPs

A determination as to the occurrence of mandated information in IEPs was based on questions in the IEP Evaluation Checklist. The following criteria were used to determine whether or not the following types of mandated information were included:

1) Statement of present level of performance: any number circled in the column labeled "Present level of functioning listed" (Item 6, Column A).

2) Statement of annual goals: any positive number entered in column labeled "Number of goals listed" (Item 6, Column E).

3) Short-term objectives: any positive number entered in column labeled "Number of short-term objectives" (Item 7, Column A).

4) Statement of specific educational services to be provided: (a) any appropriate information entered under a heading requesting such information (Item 3, Column B, number 14); (b) any positive number entered in column labeled "Number of goals listed" (Item 6, Column E); (c) any positive number entered in column labeled "Number of short-term objectives" (Item 7, Column A); or (d) any number circled to indicate a related service to be received (Item 10).

5) Statement of extent of participation in the regular program: any amount of time (either percent or minutes per week) entered in question regarding proportion or amount of time assigned to special services (Item 9).

6) Projected date for initiation of services: an item circled in the question on beginning dates of service (Item 12) which stated that the date(s) was (were) (a) specifically stated; (b) could be inferred from dates contained in goals or objectives; or (c) could be inferred from date IEP was prepared.

7) Anticipated duration of services: an item circled in the question on duration of services (Item 13) which stated that the duration was (a) specifically stated; (b) inferred from dates given for goals or objectives; (c) inferred from heading stating that goals were annual goals; or (d) that services would be provided "as long as needed."

8) Proposed evaluation criteria: any appropriate information entered under a heading requesting such information, or any positive number entered in column labeled "Number of objectives that include a logical statement of expected behavior to an acceptable standard" (Item 7, Column B). Included in this latter criterion were (a) a statement of observable behavior; (b) a statement of specific criteria by which student would be judged to have met/not met that objective; and (c) reasonably logical internal consistency between statements "a" and "b." (It should be noted that evaluation criteria listed anywhere in the IEP were considered to be a part of the related short-term objectives.)

9) Proposed evaluation procedures: an item circled in the question regarding evaluation procedures (Item 14) which stated that the procedure was (a) clear from the short-term objectives; (b) contained in a precise statement of how the evaluation (of the short-term objectives listed in the IEP) should be conducted; or (c) inferred from unclear statements of how the evaluation (of short-term objectives listed in the IEP) should be conducted, or from unclear short-term objectives. (An example of an unclear statement or unclear objective is "will learn multiplication tables." While it is not clear to an impartial observer exactly what procedure will be used to determine whether or not the objective has been met, there is some reason to believe that an appropriate procedure may be assumed.)

10) Proposed schedules for determining whether instructional objectives are being met: an item in the question concerning evaluation schedules (Item 15) which stated that the schedule was (a) specifically stated as being the evaluation schedule, (b) implied from the short-term objectives, or (c) implied from beginning-of-treatment and end-of-treatment dates.

11) Assurances of at least an annual evaluation: an item circled in the question regarding an annual evaluation (Item 16) which stated that (a) all of the short-term objectives appear to require at least an annual evaluation or (b) some, but not all, of the short-term objectives appear to require at least an annual evaluation.

Calculations Regarding Relationships Between Information in IEPs and IEP Headings

1) On page 4.7, it is noted that 96 percent of the IEPs that had a heading requesting present-level-of-performance information actually contained the information. This is computed by dividing 86.3 by 89.7 (see Appendix Table D.4, Line 1).

   It also is noted on page 4.7 that only 37 percent of the IEPs that did not have such a heading actually provided the data. Since 10.3 percent (100 percent - 89.7 percent) of the IEPs did not have a heading for the subject information, and since 90.1 percent of IEPs provided the information (see Table D.3, Line 1), 3.8 percent (90.1 percent - 86.3 percent) did not have a heading but did provide the information. This computes to 36.9, or 37, percent (3.8 ÷ 10.3).

2) The similar information on page 4.7 regarding supporting data is similarly computed:

   30.2 ÷ 36.4 = 83 percent (see Table D.5, Line 6)
   100 - 36.4 = 63.6 percent
   50.9 (see Table D.3, Line 2) - 30.2 = 20.7 percent
   20.7 ÷ 63.6 = 32.5, or 32, percent.

3) Similar information on page 4.9 regarding annual goals is similarly computed:

   93.5 ÷ 94.5 = 99 percent (see Table D.4)
   100 - 94.5 = 5.5
   94.4 (see Table D.1) - 93.5 = .9
   .9 ÷ 5.5 = 16 percent.

4) Similar information on page 4.10 regarding short-term objectives was similarly computed:

   89 ÷ 91.7 = 97 percent (see Table D.4)
   100 - 91.7 = 8.3
   91.1 (see Table D.1) - 89 = 2.1
   2.1 ÷ 8.3 = 25 percent.

5) On page 4.13, it is noted that of the 89 percent of IEPs that contain a heading (either with the annual goals, with the short-term objectives, or as a separate item) under which to include beginning-of-service data, at least 91 percent include quite specific information.

80.6 percent ÷ 88.8, or 89 percent, = 91 percent (see Table D.4, Line 6)

This 91 percent is a lower limit since some IEPs included quite specific beginning-of-service data, but not under a heading requesting the data.

As noted on page 4.13, 11.2 percent of the IEPs did not include a heading for the subject information (100 - 88.8). Four percent of the IEPs contained quite specific information but not under a heading requesting the information. (65.8 + 18.8 = 84.6 percent contained quite specific information [see the "totals" column in Table D.10]. 84.6 - 80.6 = 4 percent contained the information under a heading).

This 4 percent was distributed over the 11.2 percent that did not include a heading and the 8.2 percent (88.6 - 80.6 from Table D.4, Line 6) that included a heading but no information under the heading.

Assuming an equal distribution:

$$\frac{4}{11.2 + 8.2} = \frac{x}{11.2}$$

$19.4\,x = 44.8$

$x = 2.3$ percent of IEPs that had no heading but did include the information

$2.3 \div 11.2 = 21$ percent.

6) Similar data on pages 4.14-4.15 regarding duration-of-service information was computed using the same procedure outlined in Item 5 above.

66.5 ÷ 80.2 (Table D.4) = 83 percent (lower limit).

100 - 80.2 = 19.8 percent with no heading.

49.3 + 24.6 (Table D.11) = 73.9 percent with quite specific information.

73.9 - 66.4 = 7.5 percent with information but no heading.

80.2 - 66.4 = 13.8 with heading but no information under the heading.

19.8 + 13.8 = 33.6 percent without information under a heading.

$$\frac{33.6}{7.5} = \frac{19.8}{x}$$

$33.6x = 148.5$

$x = 4.41$

4.41 ÷ 19.8 = 22 percent estimated proportion of IEPs that did not have headings but contained quite specific information.

7) On pages 4.15-4.16, it is noted that a minimum of 79 percent of the IEPs with a heading requesting evaluation criteria contain evaluation crieria, and that a maximum of 49 percent of IEPs without such a heading contain the criteria. This was computed as follows:

42.2 ÷ 53.3 (Table D.4) = 79 percent of IEPs with the information. This is a minimum figure since it does not include IEPs that did not have information under the heading but did contain at least one objective written in measurable terms.

100 - 53.3 = 46.7 percent of IEPs that did not have the subject heading.

65.2 (Table D.1) - 42.2 = 23 percent of IEPs that included at least one objective written in measurable terms, but did not have information listed under a heading (however, the IEP might have contained the heading).

23 ÷ 46.7 = 49 percent of IEPs without a heading but containing the information. This is a maximum percentage since, as noted above, the 23 percent figure included some IEPs that contained the heading but no information entered under it.

Table D.1

DISTRIBUTION OF IEPs WITH INFORMATON MANDATED BY SECTION 602 OF P.L. 94-142, BY AGE LEVELS

(In percents, with standard errors noted in parentheses)

Mandated Information Areas	Student Age Levels[a]				Total Ages 3-21
	3-5	6-12	13-15	16-21	
Statement of the present level of educational performance	95.2 (2.2)	89.1 (2.3)	92.2 (1.5)	90.6 (2.3)	90.1 (1.7)
Statement of annual goals	89.9 (5.2)	94.0 (1.6)	96.1 (0.9)	94.8 (1.9)	94.4 (1.3)
Short-term objectives	85.3 (5.1)	91.9 (1.4)	89.9 (1.9)	91.0 (2.1)	91.1 (1.3)
Statement of specific educational services to be provided	98.0 (2.0)	98.9 (0.6)	98.8 (0.5)	99.4 (0.4)	98.9 (0.5)
Statement of the extent to which child will be able to participate in regular educational programs	47.1 (11.5)	64.6 (2.9)	61.0 (3.6)	58.4 (4.1)	62.4 (2.7)
Projected date for initiation of specific services	98.1 (1.9)	99.3 (0.3)	99.4 (0.4)	99.4 (0.3)	99.3 (0.2)
Anticipated duration of specific services	88.0 (5.4)	95.0 (1.3)	95.5 (1.5)	95.6 (1.8)	94.9 (1.3)
Proposed evaluation criteria	59.5 (7.1)	65.4 (2.8)	67.3 (3.1)	62.8 (3.7)	65.2 (2.2)
Proposed evaluation procedures	85.3 (5.1)	91.9 (1.4)	89.9 (1.9)	91.0 (2.1)	91.1 (1.3)
Proposed schedules for determining whether instructional objectives are being met	76.4 (8.4)	88.2 (1.9)	86.7 (2.2)	87.5 (2.4)	87.4 (1.8)
Assurances of at least an annual evaluation	76.4 (8.4)	88.4 (1.9)	86.7 (2.2)	87.4 (2.5)	87.5 (1.8)

[a] Percents are based on column estimated population totals, adjusted for nonresponse.

Table D.2

DISTRIBUTION OF IEPs BY NUMBER OF MANDATED AREAS FOR WHICH IEP CONTAINS INFORMATION, BY REGULAR AND SPECIAL SCHOOLS

(In percents, with standard errors noted in parentheses)

Number of Mandated Information Areas	School Type[a/]		Total All Schools
	Regular	Special	
All eleven mandated areas	36.7 (2.4)	32.2 (5.7)	36.5 (2.3)
Ten mandated areas	34.5 (2.2)	33.6 (4.1)	34.5 (2.2)
Nine mandated areas	14.1 (1.7)	18.3 (3.8)	14.2 (1.6)
Eight mandated areas	3.6 (1.0)	2.0 (1.4)*	3.5 (0.9)
Seven mandated areas	1.7 (0.6)	0.9 (0.5)*	1.6 (0.6)
Six mandated areas	3.9 (0.8)	4.8 (2.2)	4.0 (0.7)
Five mandated areas	3.4 (0.7)	6.6 (2.6)	3.6 (0.7)
Four mandated areas	0.7 (0.3)*	0.7 (0.4)*	0.7 (0.2)*
Three mandated areas	0.8 (0.3)*	0.5 (0.5)*	0.7 (0.3)*
Two mandated areas	0.7 (0.3)*	0.0 (0.0)*	0.7 (0.3)*
One mandated area	0.0 (0.0)*	0.5 (0.5)*	0.0 (0.0)*

* Cell has estimated sample size of less than 25.

[a/] Percents based on column estimated population totals, adjusted for nonresponse.

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Table D.3

PERCENT OF IEPs THAT INCLUDE VARIOUS TYPES, AMOUNTS, AND COMBINATIONS OF PRESENT-LEVEL-OF-FUNCTIONING INFORMATION

(Standard errors noted in parentheses)

Present-Level-of-Functioning Information	Percent
IEP contained some present level of performance information.	90.1 (1.7)
IEP contained some present level of performance information plus supporting data for at least a part of this information.	50.9 (2.5)
IEP contained present level of performance information for at least three academic or functional areas.	53.2 (2.4)
IEP contained present level of performance information in at least one academic or functional area where special education is found not to be required.	55.9 (2.7)
IEP contained present level of performance information in at least three academic or functional areas and contained supporting data for 90-100 percent of these areas.	11.3 (1.9)
IEP provides date(s) of assessment of present level of performance.	19.7 (2.4)

Table D.4

DISTRIBUTION OF IEPs CONTAINING HEADINGS FOR INFORMATION MANDATED BY SECTION 602 OF P.L. 94-142 AND DISTRIBUTION OF IEPS THAT INCLUDE INFORMATION IN THESE HEADED SPACES

(In percents, with standard errors noted in parentheses)

	Percent[a] of Students with IEPs That:	
Mandated Information Areas	Include Heading	Include Heading And Have Information Entered
Statement of the present level of educational performance	89.7 (2.0)	86.3 (2.0)
Statement of annual goals	94.5 (1.3)	93.5 (1.3)
Short-term objectives	91.7 (1.4)	89.0 (1.5)
Statement of specific educational services to be provided	80.9 (2.7)	68.2 (3.0)
Statement of the extent to which child will be able to participate in regular educational programs	76.6 (3.1)	66.5 (2.7)
Projected date for initiation of specific services	88.8 (1.9)	80.6 (2.2)
Anticipated duration of specific services	80.2 (2.8)	66.4 (3.0)
Appropriate evaluation criteria	53.3 (3.2)	42.2 (2.9)
Appropriate evaluation procedures	39.7 (3.6)	35.4 (3.3)
Appropriate schedules for determining whether instructional objectives are being met	27.5 (3.3)	19.6 (2.7)
Assurances of at least an annual evaluation[b]		

[a] Percents are based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b] A heading for this item would be inappropriate.

Table D.5

DISTRIBUTION OF IEPs CONTAINING HEADINGS FOR INFORMATION NOT MANDATED BY SECTION 602 of P.L. 94-142 AND DISTRIBUTION OF IEPs THAT INCLUDE INFORMATION IN THESE HEADED SPACES

(In percents, with standard errors noted in parentheses)

Information Heading	Percent[a] of Students with IEPs That: Include Heading	Percent[a] of Students with IEPs That: Include Heading And Have Information Entered
Student's age or birthdate	82.2 (2.4)	79.0 (2.5)
Student's grade level	58.9 (3.5)	54.8 (3.3)
Student's sex	13.4 (3.0)	12.6 (2.8)
Student's race	6.7 (2.2)	6.2 (2.0)
Student's primary language	6.0 (2.6)	5.4 (2.4)
Assessment data to support present level of performance	36.4 (3.3)	30.2 (2.9)
Date of the assessment of present level of performance	23.0 (2.7)	19.7 (2.4)
Nature of student's handicap	26.6 (3.5)	25.1 (3.3)
Student's strengths	23.3 (2.9)	19.6 (2.4)
Student's special interests	1.9 (1.0)	1.3 (0.8)
Student's school attendance record	3.1 (1.2)	1.5 (0.6)
Placement recommendation	65.5 (3.5)	61.4 (3.4)
Rationale for placement or services	22.3 (2.7)	19.7 (2.5)
Personnel responsible for services	67.2 (3.3)	60.4 (3.1)
Physical education needs	12.1 (2.3)	9.3 (1.8)
Date of preparation of IEP	83.7 (2.2)	76.9 (2.3)
Participants in the IEP process	87.0 (2.3)	83.4 (2.4)

(continued)

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Table D.5 (continued)

Information Heading	Percent[a/] of Students with IEPs That: Include Heading	Percent[a/] of Students with IEPs That: Include Heading And Have Information Entered
Signature of individuals who approved the IEP	61.4 (3.3)	55.4 (3.3)
Titles of individuals who approved the IEP	75.6 (2.7)	71.6 (2.8)
Parental approval	73.6 (2.9)	56.2 (2.7)
Results of parental notification	9.6 (1.9)	8.4 (1.7)
Priority listing of annual goals	17.0 (2.4)	14.8 (2.2)
Recommended instructional materials, resources, strategies or techniques	59.5 (3.2)	52.0 (3.2)
Date short-term objectives met	23.0 (3.0)	11.0 (1.7)
Proposed IEP review date	48.8 (3.9)	35.2 (3.0)
Actual IEP review date	8.3 (1.6)	5.9 (1.0)
Results of IEP review	8.0 (1.7)	4.6 (1.1)
Participants in IEP review	6.8 (1.4)	4.0 (0.9)
Other[b/]	37.8 (3.5)	31.2 (3.3)

[a/] Percents are based on the estimated population of students with IEPs, adjusted for nonresponse.

[b/] IEPs with at least one "other" heading. Included such headings as: date of referral, provisions for mainstreaming, or last grade obtained.

Table D.6

DISTRIBUTION OF IEPs, BY NUMBER OF GOALS PER IEP AND BY SCHOOL TYPE
(In percents, with standard errors noted in parentheses)

Number of Goals	School Type[a/]		Total
	Regular	Special	
0	5.7 (1.3)	4.2 (1.6)*	5.6 (1.3)
1	15.7 (1.5)	2.0 (1.1)*	15.2 (1.5)
2	13.8 (1.2)	6.5 (3.0)	13.5 (1.1)
3	13.6 (1.1)	5.8 (1.5)	13.3 (1.0)
4	11.4 (1.0)	8.1 (1.8)	11.2 (0.9)
5	8.2 (0.7)	10.7 (2.1)	8.3 (0.7)
6	7.1 (0.8)	10.4 (1.9)	7.2 (0.8)
7	5.1 (0.7)	6.5 (1.2)	5.1 (0.7)
8	3.3 (0.5)	5.6 (1.2)	3.4 (0.5)
9	3.2 (0.5)	3.6 (1.2)*	3.2 (0.5)
10	2.3 (0.4)	5.6 (1.5)	2.4 (0.4)
11-15	6.6 (0.9)	15.1 (2.7)	6.9 (0.9)
16-25	2.8 (0.0)	11.5 (2.1)	3.1 (0.6)
26 or more	1.4 (0.5)	4.3 (1.2)*	1.6 (0.5)
Mean Number of Goals[b/]	5.4 (0.3)	10.1 (0.8)	5.6 (0.3)
Standard Deviation of Mean	6.1	10.5	6.4
Range of Goals	0-118	0-143	0-143

* Cell has estimated sample size of less than 25.

[a/] Percents are based on column estimated population totals, adjusted for nonresponse.

[b/] Mean number of goals is based on the total number of IEPs with at least one goal.

Table D.7

DISTRIBUTION OF IEPs, BY NUMBER OF OBJECTIVES PER IEP AND BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Number of Objectives	School Type[a]		Total
	Regular	Special	
0	8.8 (1.4)	11.0 (4.1)	8.9 (1.3)
1-2	5.6 (0.8)	1.3 (0.9)*	5.4 (0.7)
3-4	9.8 (1.4)	2.9 (1.2)*	9.5 (1.3)
5-6	9.5 (1.0)	4.3 (1.6)*	9.3 (0.9)
7-8	9.1 (0.9)	6.0 (1.4)	9.0 (0.9)
9-10	6.5 (0.8)	4.3 (1.1)*	6.4 (0.7)
11-12	4.8 (0.6)	3.9 (1.2)*	4.8 (0.6)
13-15	6.5 (0.7)	7.0 (1.4)	6.5 (0.7)
16-20	9.0 (0.8)	11.1 (2.4)	9.1 (0.8)
21-30	9.4 (1.0)	15.4 (2.5)	9.6 (1.0)
31-50	10.1 (1.1)	14.5 (3.0)	10.3 (1.1)
51-70	5.6 (0.8)	7.3 (1.7)	5.7 (0.8)
71-100	2.4 (0.5)	5.1 (1.6)	2.5 (0.4)
101 or more	2.8 (0.7)	5.8 (1.4)	2.9 (0.6)
Mean Number of Objectives[b]	25.4 (1.9)	38.0 (4.5)	25.9 (1.9)
Standard Deviation of Mean	47.7	55.6	48.1
Range of Objectives	0-1,002	0-731	0-1,002

* Cell has estimated sample size of less than 25.

[a] Percents are based on column estimated population totals, adjusted for nonresponse.

[b] Mean number of objectives is based on the total number of students with at least one objective.

Table D.8

DISTRIBUTION OF SHORT-TERM OBJECTIVES OVER VARIOUS TIME FRAMES, BY TYPE OF SCHOOL

(In percents, with standard errors noted in parentheses)

Time Frame Of Objectives	Percent of Objectives For Students Enrolled In:		
	Regular Schools[a]	Special Schools[b]	Totals[c]
Full year	65.0 (2.8)	59.3 (5.2)	64.6 (2.7)
Less than full year	31.9 (2.7)	36.0 (4.3)	32.2 (2.6)
No time frame specified	3.1 (1.0)	4.7 (2.7)	3.2 (1.0)
Total	100.0	100.0	100.0

[a] Percents in this column are based on 61,364,267, the estimated total number of objectives written for students in regular schools.

[b] Percents in this column are based on 4,300,206, the estimated total number of objectives written for students in special schools.

[c] Percents in this column are based on 65,664,472, the estimated total number of objectives written for students in both regular and special schools.

Table D.9

PERCENT OF IEPs, BY PERCENT OF SHORT-TERM OBJECTIVES WITH A LOGICAL STATEMENT OF EXPECTED BEHAVIOR TO A SPECIFIED STANDARD AND BY AGE LEVEL

(In percents, with standard errors noted in parentheses)

Percent of Short-Term Objectives With a Logical Statement of Expected Behavior to a Specified Standard[a]	Student Age Levels				Total Ages 3-21
	3-5	6-12	13-15	16-21	
0	46.3 (8.3)	45.4 (2.9)	44.8 (4.2)	51.3 (4.5)	46.1 (2.5)
>0 -10	0.1 (0.1)*	3.6 (0.7)	5.5 (1.4)	3.2 (1.0)*	3.8 (0.5)
>10 -20	0.3 (0.2)*	3.7 (0.8)	4.2 (1.0)*	4.6 (1.2)	3.8 (0.6)
>20 -30	1.1 (1.0)*	3.1 (0.7)	2.0 (0.6)*	5.0 (0.9)	3.1 (0.5)
>30 -40	0.1 (0.1)*	2.3 (0.6)	4.2 (1.1)*	4.3 (1.7)*	2.9 (0.5)
>40 -50	11.1 (6.2)*	4.0 (0.9)	4.6 (1.0)	6.0 (1.4)	4.6 (0.7)
>50 -60	1.7 (1.3)*	2.7 (0.6)	4.7 (1.2)	3.1 (1.1)*	3.1 (0.5)
>60 -70	2.1 (2.1)*	4.1 (0.7)	4.0 (1.1)	3.5 (1.1)*	3.9 (0.6)
>70 -80	1.4 (1.0)*	5.2 (1.0)	7.2 (2.2)	2.7 (0.8)*	5.2 (0.8)
>80 -90	5.3 (4.6)*	4.9 (1.2)	6.1 (1.6)	5.5 (1.5)	5.3 (0.9)
>90 -100	30.4 (6.8)*	21.0 (1.9)	12.7 (2.4)	10.8 (2.7)	18.3 (1.6)
Mean percent of objectives stated in measurable terms[b]	44.4 (7.6)	37.5 (2.3)	33.4 (3.6)	27.9 (3.6)	35.6 (2.1)

* Cell has estimated sample size of less than 25.

[a] Only IEPs with at least one short-term objective are included.

[b] The mean percent of objectives per IEP that were stated in measurable terms, given that the IEP had contained at least one objective.

Table D.10

DISTRIBUTION OF IEPs, BY DEGREE OF SPECIFICITY OF THE STATEMENT OF BEGINNING DATES OF SERVICE AS CONTAINED IN IEPs AND BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Statement of Beginning Date of Service	School Type[a]		Total[a]
	Regular	Special	
Is specifically stated	65.6 (2.9)	70.2 (5.5)	65.8 (2.8)
May be inferred from dates given for goals or objectives	18.8 (2.5)	17.4 (4.7)	18.8 (2.4)
Must be inferred from date IEP was prepared	14.9 (1.8)	11.3 (2.8)	14.8 (1.7)
There is insufficient information upon which to base an inference	0.7 (0.2)*	1.1 (0.7)	0.7 (0.2)*

* Cell has estimated sample size of less than 25.

[a] Percents are based on column estimated population totals, adjusted for nonresponse.

Table D.11

DISTRIBUTION OF IEPs BY DEGREE OF SPECIFICITY
OF THE STATEMENT OF DURATION OF SERVICES
TO BE PROVIDED AS CONTAINED IN IEPs,
BY SCHOOL TYPE
(In percents, with standard errors noted in parentheses)

Duration of Services To Be Provided	School Type[a/]		Total
	Regular	Special	
Is specifically stated	48.7 (3.4)	65.1 (5.6)	49.3 (3.4)
May be inferred from dates given for goals or objectives	24.7 (2.6)	21.7 (5.2)	24.6 (2.6)
Must be inferred from headings that state goals are "annual" goals	18.8 (2.2)	9.0 (2.3)	18.4 (2.1)
States that services will be provided "as long as needed"	2.7 (0.9)	0.5 (0.4)*	2.7 (0.8)
There is insufficient information upon which to base an inference	5.1 (1.3)	3.7 (2.0)*	5.1 (1.3)

* Cell has estimated sample size of less than 25.

[a/] Percents are based on column estimated population totals, adjusted for nonresponse.

Table D.12

DISTRIBUTION OF IEPs BY DEGREE OF SPECIFICITY OF STATEMENT OF THE EVALUATION PROCEDURE FOR EVALUATING SHORT-TERM OBJECTIVES AS CONTAINED IN IEPs, BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Statement of the Evaluation Procedure	School Type[a]		Total
	Regular	Special	
Procedure is clear from short-term objectives	33.5 (2.3)	31.0 (6.5)	33.4 (2.3)
Procedure is a precise statement of how the evaluation should be conducted	6.4 (1.7)	5.6 (3.5)	6.4 (1.7)
Procedure must be inferred from unclear statements or from unclear short-term objectives	51.3 (2.5)	52.4 (7.3)	51.3 (2.5)
Procedure cannot be inferred because IEP has no short-term objectives	8.8 (1.0)	11.0 (3.6)	8.9 (1.0)

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[a] Percents are based on column estimated population totals, adjusted for nonresponse.

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Table D.13

DISTRIBUTION OF IEPs BY DEGREE OF SPECIFICITY OF THE STATEMENT OF THE EVALUATION SCHEDULE FOR THE SHORT-TERM OBJECTIVES AS CONTAINED IN IEPs, BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Statement of the Evaluation Schedule	School Type[a]		Total
	Regular	Special	
Is specifically stated as being the evaluation schedule	14.0 (2.6)	10.9 (3.7)	13.9 (2.5)
May be inferred from the short-term objectives	36.1 (2.8)	45.4 (7.1)	36.5 (2.8)
Must be implied from beginning-of-treatment and end-of-treatment dates	37.3 (2.8)	30.1 (6.2)	37.0 (2.8)
Is not stated or implied	12.6 (1.8)	13.6 (4.4)	12.6 (1.8)

[a] Percents are based on column estimated population totals, adjusted for nonresponse.

Table D.14

DISTRIBUTION OF IEPs BY DEGREE TO WHICH IEP INDICATES THAT AN ANNUAL EVALUATION OF SHORT-TERM OBJECTIVES IS REQUIRED, BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Statement of Annual Evaluation of Short-Term Objectives	School Type[a]		
	Regular	Special	Total
All of the short-term objectives appear to require at least an annual evaluation	87.2 (1.8)	85.4 (4.6)	87.1 (1.8)
Some but not all of the short-term objectives appear to require at least an annual evaluation	0.3 (0.2)*	0.9 (0.7)*	0.3 (0.2)*
None of the short-term objectives require at least an annual evaluation	0.2 (0.1)*	0.6 (0.6)*	0.2 (0.1)*
Such information is not given and cannot be inferred	12.3 (1.8)	13.1 (4.5)	12.4 (1.8)

* Cell has estimated sample size less than 25.

[a] Percents are based on column estimated population totals, adjusted for nonresponse.

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Table D.15

DISTRIBUTION OF IEPs WITH INFORMATION MANDATED BY SECTION 602 OF P.L. 94-142, BY SCHOOL DISTRICT PER-PUPIL EXPENDITURE

(In percents, with standard errors noted in parentheses)

Mandated Information Areas[a/]	District Per-Pupil Expenditure				Total
	Low	Medium	High	Undetermined	
Statement of the present level of educational performance	89.5 (3.2)	92.0 (1.5)	87.8 (4.2)	1.0 (0.0)*	90.1 (1.7)
Statement of annual goals	95.9 (1.7)	92.8 (2.3)	95.2 (1.7)	1.0 (0.0)*	94.4 (1.3)
Short-term objectives	89.9 (3.0)	93.0 (1.6)	89.2 (2.5)	1.0 (0.0)*	91.1 (1.3)
Statement of specific educational services to be provided	99.0 (0.8)	99.1 (0.6)	98.5 (1.0)	1.0 (0.0)*	98.9 (0.5)
Statement of the extent to which child will be able to participate in regular educational programs	74.3 (5.2)	64.4 (3.9)	49.0 (6.0)	78.6 (1.9)*	62.4 (2.7)
Projected date for initiation of specific services	99.9 (0.1)	99.0 (0.4)	99.2 (0.4)	1.0 (0.0)*	99.3 (0.2)
Anticipated duration of specific services	90.2 (4.4)	96.3 (1.1)	96.7 (1.2)	1.0 (0.0)*	94.9 (1.3)
Proposed evaluation criteria	68.4 (4.7)	65.6 (3.3)	62.1 (4.7)	66.6 (4.4)*	65.2 (2.2)
Proposed evaluation procedures	89.9 (3.0)	93.0 (1.6)	89.2 (2.5)	1.0 (0.0)*	91.1 (1.3)
Proposed schedules for determining whether instructional objectives are being met	82.4 (5.3)	90.0 (1.8)	87.4 (2.6)	1.0 (0.0)*	87.4 (1.8)
Assurances of at least an annual evaluation	82.6 (5.4)	89.9 (1.8)	87.7 (2.6)	1.0 (0.0)*	87.5 (1.8)

* Cell has estimated sample size of less than 25.

[a/] Percents are based on column estimated population totals, adjusted for nonresponse.

Table D.16

DISTRIBUTION OF IEPs BY PERCENT OF SHORT-TERM OBJECTIVES WITH A LOGICAL STATEMENT OF EXPECTED BEHAVIOR TO A SPECIFIED STANDARD, BY DISTRICT PER-PUPIL EXPENDITURE

(In percents, with standard errors noted in parentheses)

Percent of Short-Term Objectives with a Logical Statement of Expected Behavior to a Specific Standard[b]	District Per-Pupil Expenditure[a]				
	Low	Medium	High	Undetermined	Total
0	40.3 (5.2)	51.2 (3.9)	42.6 (5.1)	71.6 (0.7)*	46.1 (2.5)
>0 -10	3.4 (1.0)*	4.3 (0.9)	3.4 (0.9)	0.0 (0.0)*	3.8 (0.5)
>10 -20	4.7 (1.3)	2.6 (0.7)	4.9 (1.4)	0.0 (0.0)*	3.8 (0.6)
>20 -30	2.6 (1.0)*	2.6 (0.6)	4.1 (0.9)	1.9 (2.2)*	3.1 (0.5)
>30 -40	1.6 (0.8)*	2.9 (0.7)	3.8 (1.0)	1.9 (2.2)*	2.9 (0.5)
>40 -50	2.4 (0.9)*	4.7 (1.1)	6.4 (1.2)	0.0 (0.0)*	4.6 (0.7)
>50 -60	2.8 (1.0)*	2.2 (0.5)*	4.9 (1.2)	0.0 (0.0)*	3.1 (0.5)
>60 -70	5.9 (1.3)	3.2 (0.8)	3.5 (0.8)	0.0 (0.0)*	3.9 (0.6)
>70 -80	4.2 (0.9)	5.9 (1.5)	5.0 (1.3)	0.0 (0.0)*	5.2 (0.8)
>80 -90	8.0 (2.1)	3.7 (0.8)	5.5 (2.1)	0.0 (0.0)*	5.3 (0.9)
>90 -100	24.1 (3.7)	16.8 (2.6)	15.9 (2.7)	24.6 (5.2)*	18.3 (1.6)
Mean percentage of objectives stated in measurable terms[c]	42.7 (4.9)	31.9 (3.2)	35.7 (3.8)	25.8 (3.8)	35.6 (2.1)

* Cell has estimated sample size of less than 25.

[a] Percents are based on column estimated population totals, adjusted for nonresponse.

[b] Only IEPs with at least one short-term objective are included.

[c] The mean percent of objectives per IEP that were stated in measurable terms, given that the IEP had contained at least one objective.

Table D.17

PERCENT OF IEPs WITH HEADINGS FOR INFORMATION NOT MANDATED BY SECTION 602 OF P.L. 94-142 AND THAT HAVE INFORMATION ENTERED IN THESE HEADED SPACES, BY SCHOOL DISTRICT ENROLLMENT SIZE

(In percents, with standard errors noted in parentheses)

	Percent of Students[a] With IEPs That Include Heading and Have Information Entered By School District Enrollment Size			
Information Area	Small	Medium	Large	Total
Student's age or birthdate	63.4 (7.1)	82.1 (3.7)	84.8 (3.0)	79.0 (2.5)
Student's grade level	52.4 (6.9)	59.3 (4.8)	53.2 (5.2)	54.8 (3.3)
Nature of student's handicap	23.0 (5.1)	20.1 (4.0)	29.2 (5.9)	25.0 (3.3)
Student's sex	8.3 (2.5)	15.5 (4.5)	12.9 (5.0)	12.6 (2.8)
Student's race	2.9 (1.7)*	3.7 (1.9)	9.4 (3.9)	6.2 (2.0)
Assessment data to support present level of performance	17.9 (4.4)	34.4 (4.2)	33.8 (5.1)	30.2 (2.9)
Date of the assessment of present level of performance	10.6 (4.2)	23.4 (3.8)	21.8 (4.0)	19.7 (2.4)
Student's strengths	16.4 (4.2)	20.4 (3.1)	20.7 (4.2)	19.6 (2.4)
Physical education needs	9.0 (3.6)	7.1 (3.2)	10.9 (2.9)	9.3 (1.8)
Placement recommendation	60.6 (5.6)	58.4 (5.6)	63.6 (5.7)	61.4 (3.4)
Rationale for placement or services	13.8 (4.4)	22.2 (5.1)	21.2 (3.7)	19.7 (2.5)
Student's primary language	0.1 (0.1)*	4.0 (2.4)	9.0 (4.8)	5.4 (2.4)
Student's school attendance record	0.4 (0.3)*	1.2 (0.7)*	2.1 (1.1)	1.5 (0.6)
Student's special interests	0.1 (0.1)*	0.1 (0.1)*	2.6 (1.8)	1.3 (0.8)
Participants in the IEP process	84.4 (4.3)	84.9 (3.5)	82.0 (4.0)	83.4 (2.4)
Date of preparation of IEP	71.3 (3.9)	75.9 (3.8)	80.3 (3.6)	76.9 (2.3)
Titles of individuals who approved the IEP	77.3 (5.1)	64.7 (4.3)	73.2 (4.5)	71.6 (2.8)
Parental approval	55.0 (6.7)	51.2 (4.4)	60.0 (3.7)	56.2 (2.7)
Signature of individuals who approved the IEP	59.3 (6.9)	47.7 (4.2)	58.2 (5.5)	55.4 (3.3)

(continued)

Table D.17 (continued)

Information Area	Percent of Students With IEPs That Include Heading and Have Information Entered By School District Enrollment Size			Total
	Small	Medium	Large	
Proposed IEP review date	35.8 (5.8)	32.2 (5.0)	36.8 (4.8)	35.2 (3.0)
Results of parental notification	5.8 (3.0)	10.7 (2.3)	8.2 (2.9)	8.4 (1.7)
Actual IEP review date	5.6 (2.1)	5.2 (1.5)	6.6 (1.6)	5.9 (1.0)
Results of IEP review	4.7 (2.0)	4.8 (1.5)	4.5 (1.9)	4.6 (1.1)
Participants in IEP review	4.4 (2.0)	3.7 (1.7)	4.1 (1.4)	4.0 (0.9)
Personnel responsible for services	68.4 (5.8)	62.3 (5.2)	55.3 (4.9)	60.4 (3.1)
Recommended instructional materials, resources, strategies or techniques	56.9 (4.6)	49.9 (5.5)	50.9 (5.4)	52.0 (3.2)
Priority listing of annual goals	19.8 (6.1)	14.6 (3.7)	12.5 (2.8)	14.8 (2.2)
Date short-term objectives met	8.0 (2.4)	7.8 (3.2)	14.5 (2.7)	11.0 (1.7)
Other[b]	24.1 (4.9)	27.5 (4.8)	37.0 (5.7)	31.2 (3.3)

* Cell has estimated sample size of less than 25.

[a] Percents are based on the column estimted population totals, adjusted for nonresponse.

[b] IEPs with at least one "other" heading. Includes such headings as: date of referral, provisions for mainstreaming, or last grade obtained; no single one of which occurred in more than one percent of the IEPs.

Appendix E

Supporting Data for Chapter 5

Table E.1

TYPES OF PERSONS WHO PARTICIPATED IN THE IEP PROCESS AND WHO SIGNED IEPS: PUBLIC SCHOOL STUDENTS (3-21 YEARS)

(In percents, with standard errors noted in parentheses)

Classification of Participants/Signers	Percent[a] of IEPs with Persons Indicated as Being a:	
	Participant	Signer
Category 1: Teachers and Therapists		
One or more regular classroom teachers	13.3 (1.6)	10.4 (1.5)
One special education teacher	27.9 (2.4)	24.1 (2.4)
Two or more special education teachers	4.7 (0.7)	3.0 (0.6)
Speech or language therapist	21.4 (2.0)	15.7 (1.7)
Physical or occupational therapist(s)	0.3 (0.1)*	0.3 (0.1)*
Other therapist(s)	0.7 (0.3)*	0.6 (0.3)*
Physical education teacher(s)	0.6 (0.3)*	0.5 (0.3)*
One of the above, but can't tell which	36.4 (2.7)	26.8 (2.3)
At least one of the above	74.4 (2.2)	58.5 (2.9)
Category 2: Administrative Representations		
LEA representative(s)	21.4 (2.4)	18.5 (2.4)
Principal or assistant principal(s)	34.2 (2.9)	27.9 (2.9)
School representative(s)	6.4 (1.6)	5.9 (1.5)
Case manager(s), chairperson	15.9 (2.5)	13.3 (2.2)
Supervisor	1.7 (0.5)	1.5 (0.5)
At least one of the above	59.7 (2.8)	50.9 (3.1)
Category 3: Ancillary Personnel		
School psychologist or psychometrist(s)	13.7 (1.9)	10.4 (1.8)
Counselor(s)	10.0 (1.5)	7.9 (1.3)
Social worker(s)	3.3 (0.8)	2.0 (0.6)
Nurse	4.9 (1.8)	4.5 (1.8)
At least one of the above	24.2 (2.6)	19.2 (2.6)
Category 4: Parents		
Parent(s), guardian(s), or surrogate(s)	62.6 (2.5)	57.1 (2.7)
Category 5: Student		
Student	2.9 (0.7)	2.5 (0.6)
Category 6: Could Not Classify and Other		
Could not classify[b]	19.2 (1.9)	14.8 (1.7)
Other	11.0 (1.4)	8.7 (1.3)
At least one of the above	28.0 (2.1)	21.6 (1.9)
Category 7: Mandated Personnel		
IEPs with at least one person from each of categories 1,2, and 4	36.2 (2.3)	28.3 (2.6)
Category 8: Categories 1 and 2		
IEPs with at least one person from each of categories 1 and 2	50.2 (2.6)	39.5 (3.0)

* Cell has estimated sample size of less than 25.

[a] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b] IEPs that did not note the title or position of the participant or signer could not be classified.

Table E.2

TYPES OF PERSONS WHO PARTICIPATED IN THE IEP PROCESS AND WHO SIGNED IEPs: PUBLIC SCHOOL STUDENTS (3-5 YEARS)

(In percents, with standard errors noted in parentheses)

Classification of Participants/Signers	Percent[a] of IEPs with Persons Indicated as Being a: Participant	Signer
Category 1: Teachers and Therapists		
One or more regular classroom teachers	15.4 (5.8)*	12.2 (5.7)*
One special education teacher	28.7 (9.7)*	24.9 (9.7)*
Two or more special education teachers	3.0 (3.3)*	0.0 (0.0)*
Speech or language therapist	27.6 (3.0)*	16.4 (5.2)*
Physical or occupational therapist(s)	1.1 (0.7)*	1.1 (0.7)*
Other therapist(s)	0.4 (0.3)*	0.0 (0.0)*
Physical education teacher(s)	0.2 (0.2)*	0.2 (0.2)*
One of the above, but can't tell which	33.3 (6.7)	26.0 (5.4)
At least one of the above	72.6 (7.3)	55.4 (8.8)
Category 2: Administrative Representations		
LEA representative(s)	33.8(10.3)	32.2(10.4)
Principal or assistant principal(s)	31.6 (7.2)*	23.8 (9.3)*
School representative(s)	20.4(10.4)*	16.4(10.3)*
Case manager(s), chairperson	15.1 (4.6)*	11.9 (5.9)*
Supervisor	4.5 (3.0)*	4.5 (3.0)*
At least one of the above	65.5 (7.5)	51.9 (9.8)
Category 3: Ancillary Personnel		
School psychologist or psychometrist(s)	8.1 (5.2)*	2.7 (1.3)*
Counselor(s)	6.5 (4.8)*	3.5 (3.3)*
Social worker(s)	0.0 (0.0)*	0.0 (0.0)*
Nurse	0.3 (0.3)*	0.3 (0.3)*
At least one of the above	14.6 (7.0)*	6.2 (3.3)*
Category 4: Parents		
Parent(s), guardian(s), or surrogate(s)	53.3 (9.7)	49.3 (9.2)
Category 5: Student		
Student	0.0 (0.0)*	0.0 (0.0)*
Category 6: Could Not Classify and Other		
Could not classify[b]	36.4(10.7)	29.5(11.3)*
Other	7.3 (4.0)*	5.2 (3.5)*
At least one of the above	42.4 (9.8)	33.4(10.8)
Category 7: Mandated Personnel		
IEPs with at least one person from each of categories 1,2, and 4	34.0 (8.1)	18.3 (7.0)*
Category 8: Categories 1 and 2		
IEPs with at least one person from each of categories 1 and 2	57.3 (7.0)	38.3 (9.8)

* Cell has estimated sample size of less than 25.

[a] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b] IEPs that did not note the title or position of the participant or signer could not be classified.

Table E.3

TYPES OF PERSONS WHO PARTICIPATED IN THE IEP PROCESS AND WHO SIGNED IEPS: PUBLIC SCHOOL STUDENTS (6-12 YEARS)

(In percents, with standard errors noted in parentheses)

Classification of Participants/Signers	Percent[a] of IEPs with Persons Indicated as Being a:	
	Participant	Signer
Category 1: Teachers and Therapists		
One or more regular classroom teachers	14.7 (2.1)	11.1 (2.0)
One special education teacher	26.8 (2.5)	23.6 (2.5)
Two or more special education teachers	4.9 (0.9)	3.3 (0.8)
Speech or language therapist	28.3 (2.8)	20.5 (2.3)
Physical or occupational therapist(s)	0.2 (0.1)*	0.2 (0.1)*
Other therapist(s)	1.0 (0.4)*	0.9 (0.4)*
Physical education teacher(s)	0.3 (0.3)*	0.3 (0.3)*
One of the above, but can't tell which	34.9 (3.0)	25.3 (2.5)
At least one of the above	75.8 (2.5)	58.2 (3.2)
Category 2: Administrative Representations		
LEA representative(s)	20.7 (2.5)	17.8 (2.4)
Principal or assistant principal(s)	34.5 (3.0)	27.3 (3.0)
School representative(s)	5.4 (1.3)	5.1 (1.3)
Case manager(s), chairperson	16.7 (3.0)	13.3 (2.6)
Supervisor	1.6 (0.5)*	1.6 (0.5)*
At least one of the above	58.8 (3.1)	49.1 (3.3)
Category 3: Ancillary Personnel		
School psychologist or psychometrist(s)	13.6 (2.0)	10.0 (1.8)
Counselor(s)	7.4 (1.7)	6.5 (1.6)
Social worker(s)	2.7 (0.8)	1.5 (0.5)*
Nurse	5.2 (1.9)	4.8 (1.9)
At least one of the above	21.8 (2.8)	17.5 (2.7)
Category 4: Parents		
Parent(s), guardian(s), or surrogate(s)	66.0 (3.1)	59.9 (3.4)
Category 5: Student		
Student	2.0 (0.7)	1.9 (0.7)*
Category 6: Could Not Classify and Other		
Could not classify[b]	18.1 (2.0)	13.5 (1.6)
Other	10.7 (1.6)	8.9 (1.5)
At least one of the above	26.5 (2.4)	20.4 (2.1)
Category 7: Mandated Personnel		
IEPs with at least one person from each of categories 1,2, and 4.	38.2 (2.8)	29.8 (2.9)
Category 8: Categories 1 and 2		
IEPs with at least one person from each of categories 1 and 2	49.9 (3.0)	38.8 (3.1)

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* Cell has estimated sample size of less than 25.

[a] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b] IEPs that did not note the title or position of the participant or signer could not be classified.

Table E.4

TYPES OF PERSONS WHO PARTICIPATED IN THE IEP PROCESS AND WHO SIGNED IEPS: PUBLIC SCHOOL STUDENTS (13-15 YEARS)

(In percents, with standard errors noted in parentheses)

Classification of Participants/Signers	Percent[a] of IEPs with Persons Indicated as Being a:	
	Participant	Signer
Category 1: Teachers and Therapists		
One or more regular classroom teachers	11.4 (2.3)	9.2 (2.1)
One special education teacher	33.0 (3.8)	28.5 (3.7)
Two or more special education teachers	4.6 (1.0)	3.0 (0.8)*
Speech or language therapist	8.6 (1.5)	7.8 (1.5)
Physical or occupational therapist(s)	0.4 (0.2)*	0.3 (0.2)*
Other therapist(s)	0.1 (0.1)*	0.1 (0.1)*
Physical education teacher(s)	1.2 (0.8)*	1.1 (0.7)*
One of the above, but can't tell which	38.3 (3.6)	28.8 (3.6)
At least one of the above	72.8 (3.3)	60.5 (4.3)
Category 2: Administrative Representations		
LEA representative(s)	23.2 (3.6)	20.0 (3.7)
Principal or assistant principal(s)	34.6 (4.7)	30.2 (4.6)
School representative(s)	7.9 (2.5)	7.6 (2.5)
Case manager(s), chairperson	12.5 (2.6)	12.6 (2.6)
Supervisor	1.8 (0.8)*	0.9 (0.5)*
At least one of the above	61.1 (4.1)	55.6 (4.5)
Category 3: Ancillary Personnel		
School psychologist or psychometrist(s)	16.5 (3.4)	13.1 (3.4)
Counselor(s)	13.3 (2.0)	10.1 (1.7)
Social worker(s)	3.7 (1.1)*	2.4 (0.9)*
Nurse	7.3 (3.1)	6.7 (3.1)
At least one of the above	29.5 (4.1)	24.1 (4.2)
Category 4: Parents		
Parent(s), guardian(s), or surrogate(s)	58.6 (3.5)	53.8 (3.3)
Category 5: Student		
Student	2.3 (0.7)*	1.9 (0.6)*
Category 6: Could Not Classify and Other		
Could not classify[b]	19.5 (2.5)	15.7 (2.2)
Other	13.8 (2.3)	10.1 (2.1)
At least one of the above	30.6 (2.6)	23.6 (2.6)
Category 7: Mandated Personnel		
IEPs with at least one person from each of categories 1,2, and 4.	34.4 (3.6)	28.8 (3.6)
Category 8: Categories 1 and 2		
IEPs with at least one person from each of categories 1 and 2	51.3 (4.0)	43.5 (4.6)

* Cell has estimated sample size of less than 25.

[a] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b] IEPs that did not note the title or position of the participant or signer could not be classified.

Table E.5

TYPES OF PERSONS WHO PARTICIPATED IN THE IEP PROCESS AND WHO SIGNED IEPS: PUBLIC SCHOOL STUDENTS (16-21 YEARS)

(In percents, with standard errors noted in parentheses)

Classification of Participants/Signers	Percent[a] of IEPs with Persons Indicated as Being a:	
	Participant	Signer
Category 1: Teachers and Therapists		
One or more regular classroom teachers	9.5 (2.3)	8.4 (2.2)
One special education teacher	25.4 (3.3)	20.4 (3.2)
Two or more special education teachers	4.6 (1.4)	2.2 (0.8)*
Speech or language therapist	5.2 (1.5)	4.7 (1.5)
Physical or occupational therapist(s)	0.5 (0.3)*	0.3 (0.2)*
Other therapist(s)	0.2 (0.1)*	0.2 (0.1)*
Physical education teacher(s)	1.2 (0.8)*	1.0 (0.7)*
One of the above, but can't tell which	40.6 (4.0)	31.6 (4.0)
At least one of the above	71.1 (3.2)	57.3 (3.8)
Category 2: Administrative Representations		
LEA representative(s)	19.0 (2.9)	16.0 (2.7)
Principal or assistant principal(s)	34.0 (4.3)	28.8 (4.3)
School representative(s)	5.4 (2.0)	4.7 (2.0)
Case manager(s), chairperson	17.5 (3.0)	14.3 (2.7)
Supervisor	1.2 (0.7)*	1.2 (0.7)*
At least one of the above	60.1 (4.1)	51.8 (4.2)
Category 3: Ancillary Personnel		
School psychologist or psychometrist(s)	11.3 (3.3)	9.9 (3.3)
Counselor(s)	18.6 (2.8)	12.5 (2.5)
Social worker(s)	5.3 (3.0)	4.0 (2.4)
Nurse	1.1 (0.4)*	1.0 (0.4)*
At least one of the above	29.8 (4.4)	23.2 (4.2)
Category 4: Parents		
Parent(s), guardian(s), or surrogate(s)	55.4 (3.8)	50.8 (3.9)
Category 5: Student		
Student	9.1 (2.7)	7.1 (1.7)
Category 6: Could Not Classify and Other		
Could not classify[b]	19.6 (3.0)	15.7 (2.8)
Other	9.1 (2.1)	6.5 (1.8)
At least one of the above	27.4 (3.3)	20.9 (3.1)
Category 7: Mandated Personnel		
IEPs with at least one person from each of categories 1,2, and 4	29.9 (3.1)	23.1 (2.9)
Category 8: Categories 1 and 2		
IEPs with at least one person from each of categories 1 and 2	47.7 (3.9)	37.3 (4.0)

* Cell has estimated sample size of less than 25.

[a] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b] IEPs that did not note the title or position of the participant or signer could not be classified.

Table E.6

TYPES OF PERSONS WHO PARTICIPATED IN THE IEP PROCESS, BY TYPE OF SCHOOL

(In percents, with standard errors noted in parentheses)

Classification of Participants	Percent[a] of IEPs with Persons Indicated as Being Participants, by Type of School		
	Regular School	Special School	Total
Category 1: Teachers and Therapists			
One or more regular classroom teachers	13.6 (1.7)	6.9 (3.0)	13.3 (1.6)
One special education teacher	28.5 (2.4)	13.7 (4.2)	27.9 (2.4)
Two or more special education teachers	4.8 (0.7)	3.2 (1.5)*	4.7 (0.7)
Speech or language therapist	21.7 (2.1)	14.2 (3.1)	21.4 (2.0)
Physical or occupational therapist(s)	0.1 (0.1)*	5.2 (1.5)	0.3 (0.1)*
Other therapist(s)	0.6 (0.3)*	1.6 (0.8)*	0.7 (0.3)*
Physical education teacher(s)	0.4 (0.3)*	6.0 (3.1)	0.6 (0.3)
One of the above, but can't tell which	35.7 (2.7)	51.7 (5.1)	36.4 (2.7)
At least one of the above	74.4 (2.2)	74.5 (3.4)	74.4 (2.2)
Category 2: Administrative Representations			
LEA representative(s)	21.2 (2.4)	25.8 (5.7)	21.4 (2.4)
Principal or assistant principal(s)	34.3 (2.9)	33.2 (5.7)	34.2 (2.9)
School representative(s)	6.5 (1.6)	4.0 (2.4)*	6.4 (1.6)
Case manager(s), chairperson	15.6 (2.5)	21.7 (4.7)	15.9 (2.5)
Supervisor	1.7 (0.5)	2.7 (2.3)*	1.7 (0.5)
At least one of the above	59.5 (2.9)	64.6 (5.1)	59.7 (2.8)
Category 3: Ancillary Personnel			
School psychologist or psychometrist(s)	14.0 (1.9)	8.4 (4.1)	13.7 (1.9)
Counselor(s)	10.2 (1.5)	5.4 (2.5)	10.0 (1.5)
Social worker(s)	3.4 (0.9)	0.1 (0.0)*	3.3 (0.8)
Nurse	4.8 (1.8)	6.4 (3.3)	4.9 (1.8)
At least one of the above	24.5 (2.6)	16.1 (3.9)	24.2 (2.6)
Category 4: Parents			
Parent(s), guardian(s), or surrogate(s)	62.4 (2.5)	66.7 (4.0)	62.6 (2.5)
Category 5: Student			
Student	2.9 (0.7)	4.7 (1.7)*	2.9 (0.7)
Category 6: Could Not Classify and Other			
Could not classify[b]	19.2 (2.0)	19.5 (3.9)	19.2 (1.9)
Other	11.0 (1.4)	11.3 (3.3)	11.0 (1.4)
At least one of the above	28.1 (2.1)	27.3 (5.2)	28.0 (2.1)
Category 7: Mandated Personnel			
IEPs with at least one person from each of categories 1,2, and 4	36.2 (2.4)	35.0 (4.3)	36.2 (2.3)
Category 8: Categories 1 and 2			
IEPs with at least one person from each of categories 1 and 2	50.2 (2.7)	50.5 (4.9)	50.2 (2.6)

* Cell has estimated sample size of less than 25.

[a] Based on the column estimated total number of students with IEPs, adjusted for nonresponse.

[b] IEPs that did not note the title or position of the participant.

Table E.7

TYPES OF PERSONS WHO PARTICIPATED IN THE IEP PROCESS, BY SEVERITY OF HANDICAPPING CONDITION OF STUDENTS

(In percents, with standard errors noted in parentheses)

Classification of Participants	Percent[a] of IEPs with Persons Indicated as Being Participants, by Severity of Student Handicap			
	Mild	Moderate	Severe	Total
Category 1: Teachers and Therapists				
One or more regular classroom teachers	13.6 (2.0)	12.6 (2.2)	14.1 (2.9)	13.3 (1.6)
One special education teacher	28.3 (2.8)	27.3 (2.9)	27.8 (4.4)	27.9 (2.4)
Two or more special education teachers	4.5 (0.9)	4.3 (1.0)	6.4 (1.9)	4.7 (0.7)
Speech or language therapist	21.0 (2.6)	21.5 (2.4)	22.5 (3.5)	21.4 (2.0)
Physical or occupational therapist(s)	0.1 (0.1)*	0.4 (0.1)*	1.0 (0.4)*	0.3 (0.1)*
Other therapist(s)	0.7 (0.5)*	0.6 (0.4)*	0.7 (0.4)*	0.7 (0.3)*
Physical education teacher(s)	0.1 (0.1)*	0.9 (0.5)*	1.8 (1.3)*	0.6 (0.3)*
One of the above, but can't tell which	36.2 (3.3)	36.7 (3.2)	36.0 (4.2)	36.4 (2.7)
At least one of the above	73.8 (2.5)	74.2 (2.9)	77.5 (3.5)	74.4 (2.2)
Category 2: Administrative Representations				
LEA representative(s)	18.6 (2.4)	23.7 (3.4)	26.3 (3.7)	21.4 (2.4)
Principal or assistant principal(s)	33.1 (3.2)	35.4 (3.5)	35.4 (4.4)	34.2 (2.9)
School representative(s)	5.9 (1.9)	7.0 (1.8)	6.9 (2.6)	6.4 (1.6)
Case manager(s), chairperson	15.9 (2.5)	16.2 (3.1)	14.8 (3.4)	15.9 (2.5)
Supervisor	1.2 (0.4)*	2.4 (1.0)*	1.5 (0.9)*	1.7 (0.5)
At least one of the above	57.7 (3.3)	60.9 (3.5)	64.1 (3.6)	59.7 (2.8)
Category 3: Ancillary Personnel				
School psychologist or psychometrist(s)	12.8 (1.9)	15.0 (2.3)	14.0 (3.4)	13.7 (1.9)
Counselor(s)	9.4 (1.5)	11.5 (2.1)	8.4 (2.1)	10.0 (1.5)
Social worker(s)	3.6 (0.9)	2.6 (0.9)	3.8 (1.7)*	3.3 (0.8)
Nurse	4.1 (1.6)	5.2 (1.7)	7.1 (4.0)	4.9 (1.8)
At least one of the above	22.9 (2.7)	25.6 (3.0)	25.2 (4.4)	24.2 (2.6)
Category 4: Parents				
Parent(s), guardian(s), or surrogate(s)	61.2 (2.9)	62.3 (2.9)	68.8 (3.8)	62.6 (2.5)
Category 5: Student				
Student	2.9 (0.7)	2.9 (0.8)	3.2 (1.0)*	2.9 (0.7)
Category 6: Could Not Classify and Other				
Could not classify[b]	19.0 (2.2)	19.2 (2.4)	20.1 (3.4)	19.2 (1.9)
Other	9.5 (1.6)	13.1 (2.0)	11.0 (2.4)	11.0 (1.4)
At least one of the above	26.7 (2.4)	29.3 (2.7)	29.5 (3.7)	28.0 (2.1)
Category 7: Mandated Personnel				
IEPs with at least one person from each of categories 1,2, and 4	34.0 (2.7)	36.4 (3.0)	44.2 (3.6)	36.2 (2.3)
Category 8: Categories 1 and 2				
IEPs with at least one person from each of categories 1 and 2	48.1 (3.0)	51.0 (3.3)	56.0 (3.7)	50.2 (2.6)

* Cell has estimated sample size of less than 25.

[a] Based on the column estimated total number of students with IEPs, adjusted for nonresponse.

[b] IEPs that did not note the title or position of the participant.

Table E.8

TYPES OF PERSONS WHO PARTICIPATED IN THE IEP PROCESS BY DISTRICT PER-PUPIL EXPENDITURE LEVELS

(In percents, with standard errors noted in parentheses)

Classification of Participants	Percent[a/] of IEPs with Persons Indicated as Being Participants, by Level of District Per-Pupil Expenditure			
	Low	Medium	High	Total
Category 1: Teachers and Therapists				
One or more regular classroom teachers	24.8 (5.0)	10.3 (2.1)	8.7 (1.7)	13.3 (1.6)
One special education teacher	37.5 (5.3)	24.3 (2.8)	25.8 (5.4)	27.9 (2.4)
Two or more special education teachers	6.6 (1.6)	4.5 (1.1)	3.5 (1.1)	4.7 (0.7)
Speech or language therapist	24.9 (3.9)	22.4 (3.2)	17.4 (3.2)	21.4 (2.0)
Physical or occupational therapist(s)	0.2 (0.1)*	0.3 (0.2)*	0.4 (0.2)*	0.3 (0.1)*
Other therapist(s)	0.8 (0.4)*	1.0 (0.6)*	0.1 (0.1)*	0.7 (0.3)*
Physical education teacher(s)	0.6 (0.3)*	0.2 (0.2)*	1.1 (1.0)*	0.6 (0.3)*
One of the above, but can't tell which	38.5 (5.3)	36.9 (3.6)	33.8 (5.0)	36.4 (2.7)
At least one of the above	82.8 (3.7)	72.4 (3.5)	70.9 (4.8)	74.4 (2.2)
Category 2: Administrative Representations				
LEA representative(s)	15.6 (4.8)	23.3 (3.3)	23.8 (6.1)	21.4 (2.4)
Principal or assistant principal(s)	41.6 (4.7)	34.5 (3.8)	28.4 (6.9)	34.2 (2.9)
School representative(s)	9.2 (4.2)	3.2 (1.5)	8.7 (3.1)	6.4 (1.6)
Case manager(s), chairperson	20.7 (5.8)	15.7 (3.7)	12.4 (3.7)	15.9 (2.5)
Supervisor	0.3 (0.2)*	1.8 (0.8)*	2.7 (1.2)*	1.7 (0.5)
At least one of the above	66.7 (5.1)	59.4 (3.7)	55.4 (6.1)	59.7 (2.8)
Category 3: Ancillary Personnel				
School psychologist or psychometrist(s)	8.5 (2.7)	14.4 (2.5)	17.1 (4.8)	13.7 (1.9)
Counselor(s)	8.5 (1.9)	12.8 (2.6)	7.6 (1.9)	10.0 (1.5)
Social worker(s)	2.8 (1.8)*	3.6 (1.3)	3.2 (1.3)	3.3 (0.8)
Nurse	2.2 (1.5)*	4.6 (1.4)	7.5 (5.4)	4.9 (1.8)
At least one of the above	18.9 (3.3)	28.1 (3.3)	23.2 (6.2)	24.2 (2.6)
Category 4: Parents				
Parent(s), guardian(s), or surrogate(s)	60.9 (6.3)	65.4 (3.3)	60.4 (4.7)	62.6 (2.5)
Category 5: Student				
Student	2.8 (1.2)*	2.6 (0.9)	3.5 (1.4)	2.9 (0.7)
Category 6: Could Not Classify and Other				
Could not classify[b/]	24.2 (4.4)	16.7 (2.0)	19.2 (4.1)	19.2 (1.9)
Other	8.0 (2.3)	15.1 (2.6)	7.9 (2.2)	11.0 (1.4)
At least one of the above	30.3 (4.3)	28.7 (3.0)	25.8 (4.0)	28.0 (2.1)
Category 7: Mandated Personnel				
IEPs with at least one person from each of categories 1,2, and 4	40.6 (5.7)	36.1 (3.1)	33.4 (4.5)	36.2 (2.3)
Category 8: Categories 1 and 2				
IEPs with at least one person from each of categories 1 and 2	61.2 (5.0)	48.1 (3.4)	45.2 (5.6)	50.2 (2.6)

* Cell has estimated sample size of less than 25.

[a/] Based on the column estimated total number of students with IEPs, adjusted for nonresponse.

[b/] IEPs that did not note the title or position of the participant.

Table E.9

TEACHER RESPONSES CONCERNING THE NATURE OF PARENT, GUARDIAN, AND STUDENT PARTICIPATION IN IEP DEVELOPMENT: PUBLIC SCHOOL STUDENTS (3-21 YEARS)

(In percents, with standard errors in parentheses)

Questions About Participation In IEP Development and Approval	Teacher Responses[a/]			
	Yes	No	Don't Know	No Response
Did a parent or guardian approve the IEP by signing it?[b/]	76.2 (2.3)	22.4 (2.3)	1.3 (0.3)	0.3 (0.2)*
Did a parent or guardian verbally (in person or by telephone) approve the IEP?	77.0 (1.6)	18.4 (1.5)	4.5 (0.8)	0.4 (0.2)*
Did a parent or guardian refuse to approve the IEP on the basis of his/her considering it inappropriate?	0.2 (0.2)*	98.1 (0.6)	1.7 (0.5)	0.1 (0.1)*
Did a parent or guardian discuss the completed IEP with a teacher, counselor, or other school representative?	75.6 (1.8)	16.9 (1.3)	7.5 (1.2)	0.3 (0.2)*
Did a parent or guardian meet with the IEP committee to discuss the developed IEP?	55.2 (2.1)	39.1 (2.0)	5.6 (0.9)	0.5 (0.2)*
Did a parent or guardian participate in the development of the IEP; that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	49.3 (2.1)	45.2 (2.0)	5.4 (0.9)	0.2 (0.1)*
Has the student discussed his/her IEP with a teacher, counselor, or other school representative?	35.4 (2.0)	56.6 (2.1)	8.0 (1.2)	0.2 (0.1)*
Did the student participate in the development of the IEP, that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	9.9 (1.0)	85.7 (1.3)	4.4 (0.7)	0.2 (0.1)*

* Cell has estimated sample size of less than 25.

[a/] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b/] The percents in this row will not agree with figures shown in Table E.1 because these are two different data sources.

Table E.10

TEACHER RESPONSES CONCERNING THE NATURE OF PARENT, GUARDIAN, AND STUDENT PARTICIPATION IN IEP DEVELOPMENT AND APPROVAL: PUBLIC SCHOOL STUDENTS (3-5 YEARS)

(In percents, with standard errors noted in parentheses)

Questions About Participation In IEP Development and Approval	Teacher Responses[a/]			
	Yes	No	Don't Know	No Response
Did a parent or guardian approve the IEP by signing it?[b/]	94.7 (2.7)	4.8 (2.6)*	0.6 (0.6)*	0.0 (0.0)*
Did a parent or guardian verbally (in person or by telephone) approve the IEP?	84.6 (7.3)	12.2 (7.0)*	0.6 (0.6)*	2.7 (2.6)*
Did a parent or guardian refuse to approve the IEP on the basis of his/her considering it inappropriate?	0.0 (0.0)*	99.5 (0.6)	0.6 (0.6)*	0.0 (0.0)*
Did a parent or guardian discuss the completed IEP with a teacher, counselor, or other school representative?	92.1 (3.8)	2.2 (1.8)*	5.8 (3.3)*	0.0 (0.0)*
Did a parent or guardian meet with the IEP committee to discuss the developed IEP?	72.4 (11.1)	24.3 (11.4)*	0.7 (0.6)*	2.7 (2.6)*
Did a parent or guardian participate in the development of the IEP; that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	59.0 (11.0)	37.2 (11.3)	3.5 (2.7)*	0.4 (0.4)*
Has the student discussed his/her IEP with a teacher, counselor, or other school representative?	6.5 (3.7)*	89.2 (4.7)	3.7 (2.7)*	0.7 (0.7)*
Did the student participate in the development of the IEP, that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	0.0 (0.0)*	100.0 (0.0)	0.0 (0.0)*	0.0 (0.0)*

* Cell has estimated sample size of less than 25.

[a/] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b/] The percents in this row will not agree with figures shown in Table E.2 because these are two different data sources.

Table E.11

TEACHER RESPONSES CONCERNING THE NATURE OF PARENT, GUARDIAN, AND STUDENT PARTICIPATION IN IEP DEVELOPMENT AND APPROVAL: PUBLIC SCHOOL STUDENTS (6-12 YEARS)

(In percents, with standard errors noted in parentheses)

Questions About Participation In IEP Development and Approval	Teacher Responses[a]			
	Yes	No	Don't Know	No Response
Did a parent or guardian approve the IEP by signing it?[b]	78.3 (2.7)	20.6 (2.7)	1.0 (0.4)*	0.1 (0.1)*
Did a parent or guardian verbally (in person or by telephone) approve the IEP?	79.7 (2.0)	16.3 (1.8)	3.9 (1.0)	0.1 (0.1)*
Did a parent or guardian refuse to approve the IEP on the basis of his/her considering it inappropriate?	0.3 (0.3)*	97.9 (0.9)	1.7 (0.8)*	0.1 (0.1)*
Did a parent or guardian discuss the completed IEP with a teacher, counselor, or other school representative?	77.0 (2.1)	14.2 (1.3)	8.5 (1.8)	0.3 (0.2)*
Did a parent or guardian meet with the IEP committee to discuss the developed IEP?	59.3 (2.5)	35.4 (2.3)	4.9 (1.2)	0.4 (0.2)*
Did a parent or guardian participate in the development of the IEP; that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	52.7 (2.4)	42.2 (2.3)	4.9 (1.1)	0.3 (0.1)*
Has the student discussed his/her IEP with a teacher, counselor, or other school representative?	28.0 (2.6)	63.5 (2.7)	8.4 (1.6)	0.1 (0.1)*
Did the student participate in the development of the IEP, that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	6.3 (1.0)	89.8 (1.4)	3.9 (0.9)	0.1 (0.1)*

* Cell has estimated sample size of less than 25.

[a] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b] The percents in this row will not agree with figures shown in Table E.3 because these are two different data sources.

Table E.12

TEACHER RESPONSES CONCERNING THE NATURE OF PARENT, GUARDIAN, AND STUDENT PARTICIPATION IN IEP DEVELOPMENT AND APPROVAL: PUBLIC SCHOOL STUDENTS (13-15 YEARS)

(In percents, with standard errors noted in parentheses)

Questions About Participation In IEP Development and Approval	Teacher Responses[a]			
	Yes	No	Don't Know	No Response
Did a parent or guardian approve the IEP by signing it?[b]	70.9 (3.2)	27.7 (3.2)	1.3 (0.5)*	0.0 (0.0)*
Did a parent or guardian verbally (in person or by telephone) approve the IEP?	70.5 (3.1)	23.0 (2.6)	6.4 (1.5)	0.2 (0.2)*
Did a parent or guardian refuse to approve the IEP on the basis of his/her considering it inappropriate?	0.2 (0.1)*	99.1 (0.4)	0.7 (0.3)*	0.0 (0.0)*
Did a parent or guardian discuss the completed IEP with a teacher, counselor, or other school representative?	70.6 (3.2)	22.4 (2.9)	6.8 (1.5)	0.2 (0.2)*
Did a parent or guardian meet with the IEP committee to discuss the developed IEP?	46.9 (3.3)	44.0 (3.3)	8.3 (1.5)	0.7 (0.4)*
Did a parent or guardian participate in the development of the IEP; that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	42.5 (3.3)	49.2 (3.3)	8.1 (1.3)	0.2 (0.2)*
Has the student discussed his/her IEP with a teacher, counselor, or other school representative?	46.2 (3.2)	45.0 (3.2)	8.3 (1.4)	0.5 (0.4)*
Did the student participate in the development of the IEP, that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	13.0 (1.9)	79.9 (2.6)	6.5 (1.5)	0.6 (0.5)*

* Cell has estimated sample size of less than 25.

[a] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b] The percents in this row will not agree with figures shown in Table E.4 because these are two different data sources.

Table E.13

TEACHER RESPONSES CONCERNING THE NATURE OF PARENT, GUARDIAN, AND STUDENT PARTICIPATION IN IEP DEVELOPMENT AND APPROVAL: PUBLIC SCHOOL STUDENTS (16-21 YEARS)

(In percents, with standard errors noted in parentheses)

Questions About Participation In IEP Development and Approval	Teacher Responses[a]			
	Yes	No	Don't Know	No Response
Did a parent or guardian approve the IEP by signing it?[b]	67.6 (3.4)	28.2 (3.2)	3.1 (0.7)*	1.1 (0.9)*
Did a parent or guardian verbally (in person or by telephone) approve the IEP?	69.8 (2.7)	23.5 (2.5)	5.6 (1.3)	1.1 (0.5)*
Did a parent or guardian refuse to approve the IEP on the basis of his/her considering it inappropriate?	0.1 (0.1)*	96.7 (1.0)	3.1 (0.9)*	0.1 (0.1)*
Did a parent or guardian discuss the completed IEP with a teacher, counselor, or other school representative?	70.2 (3.2)	25.4 (3.1)	4.2 (1.0)	0.2 (0.2)*
Did a parent or guardian meet with the IEP committee to discuss the developed IEP?	42.6 (3.7)	53.7 (3.9)	3.6 (0.9)*	0.1 (0.1)*
Did a parent or guardian participate in the development of the IEP; that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	39.3 (3.5)	56.8 (3.5)	3.8 (0.8)*	0.1 (0.1)*
Has the student discussed his/her IEP with a teacher, counselor, or other school representative?	60.6 (3.7)	33.0 (3.6)	6.2 (1.6)	0.1 (0.1)*
Did the student participate in the development of the IEP, that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	24.7 (3.4)	71.0 (3.5)	4.2 (0.7)	0.1 (0.1)*

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* Cell has estimated sample size of less than 25.

[a] Based on the estimated total number of students with IEPs, adjusted for nonresponse.

[b] The percents in this row will not agree with figures shown in Table E.5 because these are two different data sources.

Table E.14

TEACHERS REPORT OF PARENT AND STUDENT PARTICIPATION IN THE IEP PROCESS, BY TYPE OF SCHOOL

(In percents, with standard errors noted in parentheses)

Questions About Participation In IEP Development and Approval	Affirmative Responses by the Teacher[a]		
	Regular School	Special School	Total
Did a parent or guardian approve the IEP by signing it?[b]	76.2 (2.3)	76.1 (4.0)	76.2 (2.3)
Did a parent or guardian verbally (in person or by telephone) approve the IEP?	77.1 (1.7)	76.8 (3.6)	77.0 (1.6)
Did a parent or guardian refuse to approve the IEP on the basis of his/her considering it inappropriate?	0.2 (0.2)*	0.0 (0.0)*	0.2 (0.2)*
Did a parent or guardian discuss the completed IEP with a teacher, counselor, or other school representative?	75.4 (1.8)	79.2 (3.1)	75.6 (1.8)
Did a parent or guardian meet with the IEP committee to discuss the developed IEP?	55.1 (2.2)	56.3 (4.6)	55.2 (2.1)
Did a parent or guardian participate in the development of the IEP; that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	49.4 (2.2)	47.5 (4.1)	49.3 (2.1)
Has the student discussed his/her IEP with a teacher, counselor, or other school representative?	35.9 (2.1)	24.3 (4.8)	35.4 (2.0)
Did the student participate in the development of the IEP, that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	9.9 (1.0)	9.3 (2.7)	9.9 (1.0)

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* Cell has estimated sample size of less than 25.

[a] Based on the column estimated total number of students with IEPs, adjusted for nonresponse.

[b] The percents in this row will not agree with figures shown in Tables E.1 and E.6 because these are two different data sources.

Table E.15

TEACHERS REPORT OF PARENT AND STUDENT PARTICIPATION IN THE IEP PROCESS, BY SEVERITY OF HANDICAPPING CONDITION

(In percents, with standard errors noted in parentheses)

Questions About Participation In IEP Development and Approval	Affirmative Responses by the Teacher[a]			
	Mild	Moderate	Severe	Total
Did a parent or guardian approve the IEP by signing it?[b]	74.4 (2.7)	76.8 (2.6)	81.5 (3.1)	76.2 (2.3)
Did a parent or guardian verbally (in person or by telephone) approve the IEP?	78.2 (2.0)	75.1 (2.5)	77.9 (2.7)	77.0 (1.6)
Did a parent or guardian refuse to approve the IEP on the basis of his/her considering it inappropriate?	0.1 (0.0)*	0.5 (0.5)*	0.2 (0.2)*	0.2 (0.2)*
Did a parent or guardian discuss the completed IEP with a teacher, counselor, or other school representative?	74.3 (2.3)	76.1 (2.5)	79.0 (3.0)	75.6 (1.8)
Did a parent or guardian meet with the IEP committee to discuss the developed IEP?	51.1 (2.5)	57.8 (3.0)	63.7 (3.6)	55.2 (2.1)
Did a parent or guardian participate in the development of the IEP; that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	46.7 (2.6)	52.1 (2.8)	51.8 (4.3)	49.3 (2.1)
Has the student discussed his/her IEP with a teacher, counselor, or other school representative?	35.5 (2.6)	35.6 (2.7)	34.3 (3.4)	35.4 (2.0)
Did the student participate in the development of the IEP, that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	10.3 (1.4)	10.3 (1.5)	7.7 (1.6)	9.9 (1.0)

* Cell has estimated sample size of less than 25.

[a] Based on the column estimated total number of students with IEPs, adjusted for nonresponse.

[b] The percents in this row will not agree with figures shown in Tables E.1 and E.7 because these are two different data sources.

Table E.16

TEACHERS REPORT OF PARENT AND STUDENT PARTICIPATION IN THE IEP PROCESS, BY DISTRICT PER-PUPIL EXPENDITURE LEVELS

(In percents, with standard errors noted in parentheses)

Questions About Participation In IEP Development and Approval	Affirmative Responses by the Teacher[a]			
	Low	Medium	High	Total
Did a parent or guardian approve the IEP by signing it?[b]	76.5 (4.5)	76.8 (3.1)	75.6 (3.7)	76.2 (2.3)
Did a parent or guardian verbally (in person or by telephone) approve the IEP?	79.5 (3.2)	74.1 (2.6)	79.0 (2.5)	77.0 (1.6)
Did a parent or guardian refuse to approve the IEP on the basis of his/her considering it inappropriate?	0.1 (0.1)*	0.1 (0.1)*	0.6 (0.5)*	0.2 (0.2)*
Did a parent or guardian discuss the completed IEP with a teacher, counselor, or other school representative?	79.5 (3.4)	71.6 (2.9)	78.1 (2.9)	75.6 (1.8)
Did a parent or guardian meet with the IEP committee to discuss the developed IEP?	53.0 (5.2)	55.3 (2.9)	57.0 (3.7)	55.2 (2.1)
Did a parent or guardian participate in the development of the IEP; that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	46.6 (4.5)	50.5 (2.8)	50.2 (4.1)	49.3 (2.1)
Has the student discussed his/her IEP with a teacher, counselor, or other school representative?	27.2 (4.2)	40.2 (3.3)	34.9 (3.8)	35.4 (2.0)
Did the student participate in the development of the IEP, that is, did he/she meet with the IEP committee during the development process and provide inputs to the IEP?	5.5 (1.5)	11.1 (1.5)	11.1 (2.1)	9.9 (1.0)

* Cell has estimated sample size of less than 25.

[a] Based on the column estimated total number of students with IEPs, adjusted for nonresponse.

[b] The percents in this row will not agree with figures shown in Tables E.1 and E.8 because these are two different data sources.

Table E.17

MEAN NUMBER OF SCHOOL PERSONNEL WHO PARTICIPATED IN THE IEP PROCESS, BY CATEGORY AND STUDENT AGE

(Standard errors are noted in parentheses)

Classification of Participants	Mean[a] Number of Participants				
	3-5	6-12	13-15	16-21	Total
Category 1: Teachers and Therapists	1.26 (0.16)	1.42 (0.06)	1.31 (0.07)	1.39 (0.10)	1.39 (0.06)
Category 2: Administrative Representative	1.10 (0.26)	0.89 (0.06)	0.94 (0.07)	0.90 (0.07)	0.91 (0.05)
Category 3: Ancillary Personnel	0.16 (0.07)	0.33 (0.05)	0.40 (0.07)	0.44 (0.07)	0.37 (0.04)
Category 4: Parents[b]					
Category 5: Student[b]					
Category 6: Could Not Classify[c] and Other	0.83 (0.23)	0.54 (0.06)	0.64 (0.08)	0.64 (0.10)	0.58 (0.06)
Category 7: Mandated Personnel IEPs with at least one person from each of categories 1, 2, and 4	2.93 (0.33)	3.05 (0.09)	2.93 (0.11)	2.94 (0.12)	3.01 (0.08)
Category 8: Categories 1 and 2 IEPs with at least one person from each of categories 1 and 2	2.36 (0.28)	2.30 (0.08)	2.26 (0.11)	2.30 (0.11)	2.30 (0.07)
Total: Categories 1 through 6	3.92 (0.31)	3.94 (0.10)	4.07 (0.14)	4.12 (0.15)	3.99 (0.09)

[a] Based on IEPs with at least one participant, 92.1 percent of all IEPs.

[b] Not applicable for means.

[c] IEPs that did not note the title or position of the participant or signer could not be classified.

Table E.18

MEAN NUMBER OF SCHOOL PERSONNEL WHO PARTICIPATED IN THE IEP PROCESS, BY CATEGORY AND TYPE OF SCHOOL

(Standard errors are noted in parentheses)

Classification of Participants	Mean[a] Number of Participants		
	Regular	Special	Total
Category 1: Teachers and Therapists	1.38 (0.06)	1.45 (0.14)	1.39 (0.06)
Category 2: Administrative Representative	0.90 (0.05)	1.03 (0.11)	0.91 (0.05)
Category 3: Ancillary Personnel	0.38 (0.04)	0.23 (0.07)	0.37 (0.04)
Category 4: Parents[b]			
Category 5: Student[b]			
Category 6: Could Not Classify[c] and Other	0.58 (0.07)	0.56 (0.13)	0.58 (0.06)
Category 7: Mandated Personnel IEPs with at least one person from each of categories 1, 2, and 4	3.00 (0.08)	3.24 (0.16)	3.01 (0.08)
Category 8: Categories 1 and 2 IEPs with at least one person from each of categories 1 and 2	2.29 (0.07)	2.48 (0.15)	2.30 (0.07)
Total: Categories 1 through 6	3.99 (0.09)	4.08 (0.19)	3.99 (0.09)

[a] Based on IEPs with at least one participant, 92.1 percent of all IEPs.

[b] Not applicable for means.

[c] IEPs that did not note the title or position of the participant or signer could not be classified.

Appendix F

Supporting Data for Chapter 6

Table F.1

PROPORTION OF IEPs THAT CONTAIN A STATEMENT OF: (1) PRESENT LEVEL OF FUNCTIONING, (2) NEED, AND (3) NORMAL FUNCTIONING, BY ACADEMIC AND FUNCTIONAL AREAS

(In percents, with standard errors noted in parentheses)

	Percent of IEPs with Statement of:[a]		
Academic or Functional Area	Present Level Of Functioning	Need	Normal Functioning
1. Reading or oral or written English	65.2 (2.3)	61.2 (2.2)	25.2 (1.8)
2. Mathematics	53.1 (2.1)	47.7 (2.1)	17.9 (1.5)
3. Other academic[b]	39.5 (2.3)	31.1 (1.9)	20.1 (1.6)
4. Social adaptation	33.0 (2.4)	20.5 (1.5)	21.8 (2.1)
5. Self-help skills	9.8 (1.4)	4.5 (0.7)	7.1 (1.1)
6. Emotional	1.9 (0.5)	1.1 (0.2)	0.9 (0.5)*
7. Physical education	3.4 (0.8)	1.5 (0.5)	2.3 (0.5)
8. Motor skills	23.2 (2.3)	15.1 (1.3)	13.6 (1.8)
9. Speech	33.4 (2.0)	29.4 (1.8)	9.8 (1.1)
10. Visual acuity	19.0 (2.2)	11.4 (1.3)	10.3 (1.6)
11. Hearing	19.1 (1.6)	12.2 (1.0)	9.5 (1.4)
12. Vocational/ prevocational	6.2 (0.9)	3.7 (0.6)	4.1 (0.7)
13. Other[c]	9.0 (1.6)	4.8 (0.7)	5.2 (1.3)

* Cell has an estimated sample size of less than 25.

[a] Percents are based on the estimated population of students with IEPs.

[b] Includes the combined academic areas of science, social science, general academic, and other academic.

[c] Includes such functional areas as general physical health, kinesthetic or perceptual skills.

Table F.2

PROPORTION OF IEPs THAT CONTAIN A STATEMENT OF PRESENT LEVEL OF FUNCTIONING, BY ACADEMIC OR FUNCTIONAL AREAS AND BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Academic or Functional Area	School Type[a/]		Total All Schools
	Regular	Special	
1. Reading or oral or written English	65.1 (2.4)	68.2 (5.3)	65.2 (2.3)
2. Mathematics	52.9 (2.2)	60.0 (5.7)	53.1 (2.1)
3. Other academic[b/]	39.0 (2.3)	49.7 (4.6)	39.5 (2.3)
4. Social adaptation	32.2 (2.5)	50.4 (4.8)	33.0 (2.4)
5. Self-help skills	9.0 (1.5)	27.6 (5.0)	9.8 (1.4)
6. Emotional	1.8 (0.5)	3.2 (1.1)*	1.9 (0.5)
7. Physical education	2.9 (0.8)	14.0 (4.4)	3.4 (0.8)
8. Motor skills	22.5 (2.4)	36.6 (5.2)	23.2 (2.3)
9. Speech	33.8 (2.0)	24.8 (3.8)	33.4 (2.0)
10. Visual acuity	19.2 (2.2)	14.7 (3.0)	19.0 (2.2)
11. Hearing	19.2 (1.6)	15.8 (3.6)	19.1 (1.6)
12. Vocational/prevocational	5.6 (0.9)	18.4 (4.2)	6.2 (0.9)
13. Other[c/]	8.6 (1.6)	16.9 (4.0)	9.0 (1.6)

* Cell has an estimated sample size of less than 25.

[a/] Percents are based on column estimated population totals, adjusted for nonresponse.

[b/] Includes the combined academic areas of science, social science, general academic, and other academic.

[c/] Includes functional areas such as general physical health and kinesthetic or perceptual skills.

Table F.3

PROPORTION OF IEPs THAT CONTAIN A STATEMENT OF NEED, BY ACADEMIC OR FUNCTIONAL AREAS AND BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Academic or Functional Area	School Type[a/]		Total All Schools
	Regular	Special	
1. Reading or oral or written English	61.0 (2.3)	64.5 (5.3)	61.2 (2.2)
2. Mathematics	47.3 (2.1)	54.8 (5.7)	47.7 (2.1)
3. Other academic[b/]	30.7 (2.0)	39.8 (4.0)	31.1 (1.9)
4. Social adaptation	19.5 (1.5)	41.6 (4.0)	20.5 (1.5)
5. Self-help skills	3.7 (0.7)	21.2 (4.3)	4.5 (0.7)
6. Emotional	1.1 (0.2)*	2.3 (0.9)*	1.1 (0.2)
7. Physical education	1.1 (0.5)*	8.7 (2.7)	1.5 (0.5)
8. Motor skills	14.5 (1.3)	28.5 (4.5)	15.1 (1.3)
9. Speech	29.8 (1.9)	20.7 (3.1)	29.4 (1.8)
10. Visual acuity	11.6 (1.4)	8.6 (1.7)	11.4 (1.3)
11. Hearing	12.3 (1.0)	9.6 (2.5)	12.2 (1.0)
12. Vocational/ prevocational	3.3 (0.6)	12.5 (3.0)	3.7 (0.6)
13. Other[c/]	4.5 (0.7)	11.3 (2.9)	4.8 (0.7)

* Cell has an estimated sample size of less than 25.

[a/] Percents are based on column estimated population totals, adjusted for nonresponse.

[b/] Includes the combined academic areas of science, social science, general academic, and other academic.

[c/] Includes functional areas such as general physical health and kinesthetic or perceptual skills.

Table F.4

PROPORTION OF IEPs THAT CONTAIN A STATEMENT OF NORMAL FUNCTIONING, BY ACADEMIC OR FUNCTIONAL AREAS AND BY SCHOOL TYPE

(In percents, with standard errors noted in parentheses)

Academic or Functional Area	School Type[a]		Total All Schools
	Regular	Special	
1. Reading or oral or written English	24.9 (1.8)	31.6 (4.0)	25.2 (1.8)
2. Mathematics	17.5 (1.5)	25.8 (4.1)	17.9 (1.5)
3. Other academic[b]	19.6 (1.6)	29.5 (3.9)	20.1 (1.6)
4. Social adaptation	21.4 (2.2)	30.4 (4.8)	21.8 (2.1)
5. Self-help skills	6.6 (1.2)	18.3 (3.8)	7.1 (1.1)
6. Emotional	0.9 (0.5)*	1.0 (0.5)*	0.9 (0.5)*
7. Physical education	2.0 (0.5)	8.7 (3.3)	2.3 (0.5)
8. Motor skills	13.1 (1.8)	22.5 (4.0)	13.6 (1.8)
9. Speech	9.9 (1.2)	9.0 (2.0)	9.8 (1.1)
10. Visual acuity	10.3 (1.6)	9.1 (2.7)	10.3 (1.6)
11. Hearing	9.5 (1.4)	8.5 (2.4)	9.5 (1.4)
12. Vocational/ prevocational	3.6 (0.7)	13.3 (3.6)	4.1 (0.7)
13. Other[c]	4.9 (1.3)	11.1 (3.5)	5.2 (1.3)

* Cell has an estimated sample size of less than 25.

[a] Percents are based on column estimated population totals, adjusted for nonresponse.

[b] Includes the combined academic areas of science, social science, general academic, and other academic.

[c] Includes functional areas such as general physical health and kinesthetic or perceptual skills.

Table F.5

PROPORTION OF IEPs THAT CONTAIN ASSESSMENT RELATED INFORMATION, BY SPECIFIC ACADEMIC OR FUNCTIONAL AREAS

(In percents, with standard errors noted in parentheses)

Academic or Functional Area (1)	Present Level of Functioning Specified[a/] (2)	Contains Supporting Assessment Data[a/] (3)
1. Reading or oral or written English	65.2 (2.3)	39.9 (2.1)
2. Mathematics	53.1 (2.1)	33.6 (2.0)
3. Other academic[b/]	39.5 (2.3)	11.5 (1.5)
4. Social adaptation	33.0 (2.4)	1.7 (0.5)
5. Self-help skills	9.8 (1.4)	0.8 (0.3)*
6. Emotional	1.9 (0.5)	0.1 (0.1)*
7. Physical education	3.4 (0.8)	0.3 (0.2)*
8. Motor skills	23.2 (2.4)	3.8 (0.7)
9. Speech	33.4 (2.0)	10.2 (1.4)
10. Visual acuity	19.0 (2.2)	3.7 (0.6)
11. Hearing	19.1 (1.6)	4.6 (0.7)
12. General physical health	4.4 (1.3)	0.2 (0.1)*
13. Vocational/ prevocational	6.2 (0.9)	0.5 (0.2)*
14. Other[c/]	3.1 (0.9)	0.3 (0.1)*

* Cell has an estimated sample size of less than 25.

[a/] Percents are based on estimated population of students with IEPs, adjusted for nonresponse.

[b/] Included the combined areas of science, social science, general academic, and other academic.

[c/] Includes such functional areas as kinesthetic or perceptual skills.

Table F.6

DISTRIBUTION OF IEPs WHICH CONTAIN AT LEAST ONE ANNUAL GOAL STATEMENT PER FUNCTIONAL AREA, BY REGULAR AND SPECIAL SCHOOLS

(In percents, with standard errors noted in parentheses)

Academic or Functional Area	School Type[a]		Total All Schools
	Regular	Special	
1. Reading or oral or written English	59.5 (2.2)	69.3 (4.3)	60.0 (2.0)
2. Mathematics	42.3 (2.0)	58.4 (4.6)	43.0 (1.9)
3. Other academic[b]	31.7 (1.8)	44.0 (4.4)	32.3 (1.8)
4. Social adaptation	20.2 (1.3)	45.4 (4.5)	21.3 (1.4)
5. Self-help skills	3.3 (0.5)	26.4 (4.4)	4.4 (0.6)
6. Emotional	0.4 (0.2)*	0.4 (0.3)*	0.4 (0.1)*
7. Physical education	3.1 (0.9)	17.9 (4.7)	3.7 (0.9)
8. Motor skills	10.9 (1.2)	31.7 (5.0)	11.8 (1.1)
9. Speech	28.2 (1.9)	19.8 (3.3)	27.9 (1.8)
10. Visual acuity	7.0 (0.9)	4.4 (1.3)*	6.8 (0.8)
11. Hearing	7.7 (1.0)	2.3 (0.8)*	7.4 (0.9)
12. Vocational/ prevocational	7.1 (0.9)	25.9 (4.5)	7.9 (1.0)
13. Other[c]	2.4 (0.5)	13.9 (3.6)	2.9 (0.5)

* Cell has an estimated sample size of less than 25.

[a] Percents are based on column estimated population totals, adjusted for nonresponse.

[b] Includes the combined academic areas of science, social science, general academic, and other academic.

[c] Includes functional areas such as general physical health and kinesthetic or perceptual skills.

Table F.7

DISTRIBUTION OF IEPs WHICH CONTAIN AT LEAST ONE SHORT-TERM OBJECTIVE, BY ACADEMIC OR FUNCTIONAL AREA AND BY REGULAR AND SPECIAL SCHOOLS

(In percents, with standard errors noted in parentheses)

Academic or Functional Area	School Type[a]		Total All Schools
	Regular	Special	
1. Reading or oral or written English	64.4 (2.0)	66.5 (5.0)	62.5 (1.9)
2. Mathematics	44.8 (1.9)	60.4 (5.5)	45.5 (1.8)
3. Other academic[b]	30.0 (1.8)	45.4 (4.7)	30.7 (1.8)
4. Social adaptation	17.3 (1.1)	37.0 (5.0)	18.2 (1.1)
5. Self-help skills	3.7 (0.7)	26.8 (4.4)	4.7 (0.7)
6. Emotional	0.3 (0.1)*	0.4 (0.2)*	0.3 (0.1)*
7. Physical education	2.8 (0.5)	19.0 (5.0)	3.5 (0.1)
8. Motor skills	12.0 (1.1)	33.3 (4.8)	13.0 (1.0)
9. Speech	28.6 (2.0)	20.6 (3.6)	28.2 (1.9)
10. Visual acuity	6.4 (0.9)	5.4 (1.2)	6.3 (0.8)
11. Hearing	8.4 (1.1)	4.4 (1.2)*	8.2 (1.0)
12. Vocational/ prevocational	6.9 (0.9)	25.4 (4.5)	7.8 (0.9)
13. Other[c]	2.3 (0.4)	14.9 (3.9)	2.9 (0.4)

* Cell has an estimated sample size of less than 25.

[a] Percents are based on the total estimated population of public school students with IEPs, adjusted for nonresponse.

[b] Includes the combined academic areas of science, social science, general academic, and other academic.

[c] Includes functional areas such as general physical health and kinesthetic or perceptual skills.

Table F.8

MEAN NUMBER OF OBJECTIVES PER IEP, BY ACADEMIC AND FUNCTIONAL AREA

Academic or Functional Area	Mean[a]	Standard Error of the Mean	Standard Deviation of the Population	Sample Size
1. Reading or oral or written English	16.54	1.77	42.57	1,679
2. Mathematics	10.25	0.82	16.49	1,292
3. Other academic[b]	7.45	0.61	11.29	1,000
4. Social adaptation	5.08	0.53	6.44	613
5. Self-help skills	7.28	0.90	8.08	276
6. Emotional	3.52	1.20	3.32	17
7. Physical education	5.33	0.74	5.54	167
8. Motor skills	6.75	0.92	12.14	434
9. Speech	8.40	0.65	9.50	638
10. Visual acuity	5.35	0.76	8.01	163
11. Hearing	3.83	0.64	5.25	190
12. Vocational/ prevocational	10.01	1.91	16.41	372
13. Other[c]	5.98	0.85	8.35	142

[a] Mean for each area is based on the total number of IEPs with at least one objective for the area. See Table F.7 for the percent of IEPs that have at least one objective in these academic or functional areas.

[b] Includes the combined academic areas of science, social science, general academic, and other academic.

[c] Includes such functional areas as general physical health, kinesthetic or perceptual skills.

Table F.9

DISTRIBUTION OF IEPs WHICH CONTAIN AT LEAST ONE SHORT-TERM OBJECTIVE, BY ACADEMIC AND FUNCTIONAL AREAS AND AGE LEVELS

(In percents, with standard errors noted in parentheses)

Academic or Functional Area	Student Age Levels[a]				Total Ages 3-21
	3-5	6-12	13-15	16-21	
1. Reading or oral or written English	35.5 (7.2)	59.1 (2.5)	73.4 (2.6)	70.2 (2.9)	62.5 (1.9)
2. Mathematics	27.7 (6.5)*	39.7 (2.3)	62.0 (2.9)	53.4 (2.8)	45.5 (1.8)
3. Other academic[b]	27.9 (10.3)*	23.6 (1.9)	42.1 (3.0)	48.1 (3.7)	30.7 (1.8)
4. Social adaptation	25.2 (7.5)*	15.1 (1.3)	23.0 (2.5)	23.4 (3.0)	18.2 (1.1)
5. Self-help skills	13.2 (9.3)*	2.7 (0.6)	6.3 (1.2)	9.5 (1.8)	4.7 (0.7)
6. Emotional	0.1 (0.1)*	0.3 (0.1)*	0.3 (0.2)*	0.4 (0.3)*	0.3 (0.1)*
7. Physical education	5.7 (4.7)*	1.7 (0.5)*	5.7 (1.2)	8.2 (1.9)	3.5 (0.6)
8. Motor skills	37.5 (8.2)	13.5 (1.2)	10.9 (1.9)	7.0 (1.5)	13.0 (1.0)
9. Speech	59.5 (7.3)	36.1 (2.5)	10.1 (1.5)	9.6 (1.8)	28.1 (1.9)
10. Visual acuity	10.1 (4.5)*	7.1 (1.2)	5.1 (1.2)	3.7 (1.1)*	6.3 (0.8)
11. Hearing	10.1 (5.6)*	10.0 (1.4)	5.6 (1.4)	3.5 (1.2)*	8.2 (1.0)
12. Vocational/ prevocational	0.2 (0.2)*	2.6 (0.8)	9.9 (1.4)	31.2 (3.5)	7.8 (0.9)
13. Other[c]	0.2 (0.1)*	2.7 (0.5)	2.2 (0.6)*	5.2 (1.5)	2.9 (0.4)

* Cell has an estimated sample size of less than 25.

[a] Percents are based on column estimated population totals adjusted for nonresponse.

[b] Includes the combined academic areas of science, social science, general academic, and other academic.

[c] Includes functional areas such as general physical health and kinesthetic or perceptual skills.

Table F.10

DISTRIBUTION OF IEPs WITH RELATED SERVICES, BY REGULAR AND SPECIAL EDUCATION SCHOOLS

(In percents, with standard errors noted in parentheses)

Service Classifications	Percent of IEPs Having Service Specified for Students In:		Total
	Regular Schools	Special Education Schools	
None	87.7 (1.8)	77.4 (4.0)	87.2 (1.7)
Single Related Service	9.6 (1.5)	11.6 (2.5)	9.7 (1.4)
Two Related Services	2.1 (0.7)	4.3 (1.5)*	2.2 (0.7)
Three Related Services	0.6 (0.2)*	5.6 (1.9)	0.8 (0.2)*
Four Related Services	0.1 (0.1)*	1.2 (0.6)*	0.2 (0.1)*
Five Related Services	0.0 (0.0)*	0.1 (0.1)*	0.0 (0.0)*
Total	100.0[a/]	100.0[a/]	100.0[a/]

* Cell has an estimated sample size of less than 25.

[a/] Detail does not add to total because of rounding.

Table F.11

TYPES OF RELATED SERVICES SPECIFIED IN IEPs, BY REGULAR AND SPECIAL EDUCATION SCHOOLS

(In percents, with standard errors noted in parentheses)

	IEPs Having Service Specified for Students In:[a]		
Related Services	Regular Schools	Special Education Schools	Total
Audiology	0.4 (0.2)*	0.8 (0.7)*	0.4 (0.2)*
Counseling	2.2 (0.4)	1.4 (0.8)*	2.2 (0.4)
Medical services	1.0 (0.4)*	4.3 (2.5)*	4.2 (0.4)
Occupational therapy	0.9 (0.6)*	3.9 (1.3)*	1.0 (0.6)
Parent counseling and training	0.2 (0.1)*	0.0 (0.0)*	0.2 (0.1)*
Physical therapy	0.7 (0.6)*	4.2 (1.5)*	0.9 (0.6)*
Psychological services	1.0 (0.4)*	4.7 (2.4)	1.2 (0.4)
Recreation	0.0 (0.0)*	0.8 (0.7)*	0.1 (0.0)*
Social work service	0.6 (0.2)*	2.9 (1.5)*	0.7 (0.2)*
Transportation	5.2 (1.2)	13.6 (3.5)	5.5 (1.2)
Other[b]	3.8 (1.0)	5.2 (1.6)	3.9 (1.0)

* Cell has an estimated sample size of less than 25.

[a] Percents are based on column estimated population totals, adjusted for nonresponse. Because some students received more than one related service, percents may total more than 12.8 percent (the percent of students who received related services).

[b] Includes such services as tutoring, dental services, and vocational rehabilitation.

Appendix G

Supporting Data for Chapter 7

Table G.1

DISTRIBUTION OF IEPs CONTAINING VARIOUS COMBINATIONS OF NEED STATEMENTS, GOALS, AND OBJECTIVES IN SELECTED FUNCTIONAL AREAS

(In percents, with standard errors noted in parentheses)

Academic or Functional Areas	Sample Size	Combinations[a]							Total
		Needs, Goals, and Objectives	Needs and Goals Only	Needs and Objectives Only	Needs Only	Goals and Objectives Only	Goals Only	Objectives Only	
1. Reading or oral or written English	2083	60.7 (2.7)	6.6 (1.9)	7.4 (1.0)	7.7 (1.0)	12.1 (1.9)	1.5 (0.4)	4.1 (0.9)	100
2. Mathematics	1759	48.3 (2.6)	7.0 (1.0)	8.1 (1.1)	15.4 (1.5)	13.7 (2.0)	2.2 (0.5)	5.3 (0.8)	100
3. Social adaptation	1116	22.0 (2.2)	10.2 (1.3)	4.5 (0.8)	24.4 (2.3)	19.9 (2.2)	11.4 (1.8)	7.8 (1.4)	100
4. Self-help skills	414	17.9 (3.9)	2.1 (0.8)*	4.6 (2.1)*	28.0 (4.0)	15.1 (3.0)	15.5 (4.4)	17.0 (3.3)	100
5. Physical education	235	8.3 (2.4)*	7.1 (4.0)*	2.9 (1.3)*	7.1 (2.5)*	22.4 (4.6)	25.9 (7.1)	26.3 (5.5)	100
6. Motor skills	715	21.7 (2.8)	8.4 (1.6)	8.1 (1.6)	28.9 (3.1)	17.2 (2.6)	5.2 (1.2)	10.6 (2.2)	100
7. Speech	873	51.8 (3.7)	8.3 (1.8)	6.8 (1.7)	12.4 (1.6)	11.8 (2.5)	3.2 (0.9)	5.7 (1.3)	100
8. Visual acuity	422	16.5 (2.6)	7.4 (1.8)	4.2 (1.4)*	44.7 (4.0)	11.9 (2.4)	7.8 (1.9)	7.7 (1.9)	100
9. Hearing	428	16.8 (2.7)	8.5 (2.4)	7.2 (2.3)*	37.0 (4.3)	9.4 (2.3)	7.6 (1.5)	13.4 (2.7)	100
10. Vocational/ prevocational	529	14.4 (3.2)	2.6 (0.8)*	2.3 (0.9)*	13.7 (2.9)	38.6 (3.8)	14.8 (3.2)	13.7 (2.6)	100

* Cell has an estimated sample size of less than 25.

[a] Percents for each academic/functional area are based on the estimated number of IEPs with at least one of the three information items in that area (i.e., a need, goal, or objective). The sample sizes upon which the population estimates for each functional/academic area are based and are shown in the "Sample Size" column.

Additional Information Related to the Informativeness and Internal Consistency of IEPs

I. INTRODUCTION

While Chapters 3 and 4 generally present findings regarding discrete portions of IEPs and discrete factors regarding IEPs, this appendix section attempts to provide a global view of the documents. The particular focus here is on overall informativeness and internal consistency; that is, the extent to which an IEP (a) communicates to teachers, parents, administrators, and other concerned personnel the pertinent details of the special education and related services to be provided, and (b) presents an internally consistent program for meeting the handicapped student's unique needs. The approach taken in the study described herein was to establish four categories or levels of IEPs, each of which represents a reasonably distinct level of informativeness and internal consistency. The nationally representative sample of IEPs then was analyzed to determine the proportion of IEPs that fitted the description of each informativeness/internal consistency level.

It is important to note that this study was considered to be an exploratory investigation. Considerable difficulty was encountered in making decisions regarding the relative importance of various items of information that might be included in IEPs. While this was true for information mandated by the Act, it was particularly true for nonmandated information. It is fully recognized that there could be wide disagreement with the criteria adopted for the four IEP levels. Although the approach taken represents only one of many possible categorization schemes, it does provide a reasonable and useful strategy for analyzing the strengths and weaknesses of IEPs.

The methodology used to develop and validate the four levels, the rationale for the levels, and the procedure for placing an IEP into one of the four levels is summarized in Section II below. A description of the four levels is presented in Section III. Section IV of this appendix provides data regarding the distribution of IEPs across the four levels for the Basic Survey population. Section V provides data regarding correlations between IEP level and selected student, school, and school district variables. Section VI presents the distribution of IEPs in the four levels for subpopulations that have been selected on the basis of the findings presented in Section V.

Finally, Section VII provides a summary of major findings of the study described in the appendix.

II. DEVELOPMENT OF IEP LEVELS

A major assumption in establishing the four levels was that, while all eleven of the types of information mandated by the Act (see Chapter 4) are important, some are more important than others. For example, evaluation criteria, procedures, and schedules for determining, on at least an annual basis, whether the short-term objectives are being met, were not considered to be as critical as present-level-of-performance information, annual goals, and short-term objectives. With this assumption as a basis, the criteria for Level 1 and Level 2 IEPs were established, with Level 1 being IEPs that clearly did not contain one or more of the mandated items that were considered essential to an acceptable IEP, and Level 2 being IEPs that did include these essential items.

Another consideration in establishing the four levels was factors implied by the Act. For example, it is clear from the Act that the student's special education program should be based upon educational needs. Therefore, at least a minimal degree of internal consistency, as indicated by the inclusion of at least one annual short-term objective that related to at least one annual goal that related to at least one area of indicated need, was established as one requirement for a Level 3 IEP. The Act also implies that short-term objectives should represent "benchmarks" toward meeting the annual goals. One indication of the extent to which this is accomplished in IEPs is that more than one short-term objective be included for each annual goal. While it theoretically is possible to have only one "benchmark" and, thus, only one short-term objective, an investigation of IEPs that contained only one objective per goal revealed that in such IEPs the single short-term objective typically did not represent a benchmark toward meeting the annual goal. Instead, such IEPs typically listed objectives that were essentially identical to the goals. For example, such an IEP might list as an annual goal, "student will learn to read better" and list for the short-term objective, "student will improve reading skills." Because of this, another requirement established for a Level 3 IEP was that more than one short-term objective be included for more than 50 percent of the academic/functional areas for which annual goals were included.

The inclusion of other nonmandated information such as personnel responsible for services, participants in the IEP process, the rationale for student placement, and the student's age and grade level was considered to contribute to making the IEP more comprehensible to those who review, approve, and implement the IEP. Therefore, certain types of nonmandated information were required for Level 3 and 4 IEPs. In addition, greater levels of completeness of mandated information (i.e., fewer inferences were required to determine the inclusion of the information) and evidence of a more thorough evaluation of present level of performance were required to categorize IEPs into the higher levels. Once a complete list was made of possible requirements, analyses were conducted to determine the distributions of IEPs that met the various possible requirements. Tentative specifications for the four levels were prepared based on this analysis.

Once the tentative specifications for the four levels were established, a sample of 53 IEPs representing the full range of levels was evaluated by three impartial experts in special education. These experts had no knowledge of the specifications used to rate the IEPs and no knowledge of what levels of IEPs were included in the sample. They were instructed to: (a) assume that four levels of IEPs existed, (b) determine which of the sample IEPs should be placed in which level (although the sample might not, in the judgment of the rater, include IEPs suitable for some of the levels; in that case, some of the levels would not be represented), and (c) provide the rationale used to categorize the IEPs.

As can be seen in Table G.2, the between-rater agreement in rating the sample IEPs was not particularly high. These data emphasize the diversity of

Table G.2

INTER-RATER AGREEMENT ON IEP LEVELS

	Rater 1	Rater 2	Rater 3
Rater 1	--	.705	.560
Rater 2	.705	--	.495
Rater 3	.560	.495	--

opinions that exist regarding what constitutes an informative and internally consistent IEP. The raters tended to rate IEPs somewhat lower than the ratings initially assigned by the specifications. The raters appeared to be influenced strongly by the length of the IEPs; there was a consistent tendency to rate brief IEPs lower than would have been indicated by the tentative specifications, and to rate lengthy IEPs higher. The neatness of the IEP also appeared to be a strong influencing factor.

After carefully reviewing the reasons given by the raters for their decisions, the criteria for determining each of the levels was finalized. (See Table G.3 for final coding information.) The agreement between the raters and the final criteria was .335.[1] This relatively low agreement again emphasizes the exploratory nature of the investigation.

It should be emphasized that the resultant specifications for the four levels of IEPs represents a combination of (a) preconceived ideas of what information should be included in various informativeness/internal consistency levels of IEPs, and (b) the types of information actually contained in a sample of IEPs that was considered to include the full continuum of informativeness/internal consistency characteristics. Since questions could be raised regarding the rationale for the specific criteria established for each IEP level, it should be made clear that while some of the criteria were predetermined (e.g., the requirement that a Level 2 IEP include an annual goal and a short-term objective), other criteria (e.g., the Level 4 requirement for the student's age and grade level) were a result of describing the distinguishing characteristics of the IEPs that had been placed in each of the levels. No particular rationale for these latter types of requirements can be given other than to state that the IEP levels were not determined by the requirements; rather, the requirements describe the levels.

III. DESCRIPTION OF IEP LEVELS

A. Level 1 IEP: Incomplete Information Document

The distinguishing feature of a Level 1 IEP was that, even when the most generous assumptions are made, it did not include the information required by

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[1] This correlation coefficient was obtained by averaging the levels assigned to each IEP by the three raters and computing the correlation between this average rating and the level assigned by applying the final criteria.

Table G.3

CODING INFORMATION FOR CATEGORIZING IEPs

Following is coding information for using the IEP Evaluation Checklist (see Volume II) data to determine the informativeness/internal consistency category of the sample of IEPs.

A. Level 1

Classify as Level 1 if the IEP Evaluation Checklist shows that not all the requirements under Level 2 are met.

B. Level 2

Classify as Level 2 if the IEP Evaluation Checklist shows that all of the following requirements are met but that not all the requirements under Level 3 are met.

1) At least one number is circled in Item 6, Column C.
2) At least one number other than zero "0" is entered in Item 6, Column E.
3) At least one number other than zero "0" is entered in Item 7, Column A.
4) At least two of the following are satisfied:
    a) "1", "2", or "3" is circled in Item 12.
    b) "1", "2", "3", or "4" is circled in Item 13.
    c) Any number other than zero "0" is entered for Item 9.

C. Level 3

Classify as Level 3 if the IEP Evaluation Checklist shows that all requirements for Level 2 and all of the following requirements are met, but that not all the requirements under Level 4 are met.

1) There is at least one instance of a number other than zero "0" being entered in Item 7, Column A, for any academic or functional area (1-17) that: (a) is circled in Item 6, Column C; and (b) has a number other than zero "0" entered in Item 6, Column E. (I.e., for at least one academic/functional area, i, $7A_i$, $6C_i$, and $6E_i$ are all positive.)
2) For more than 50 percent of the academic/functional areas (1-17) for which a number other than zero is entered in Item 6, Column E, a number larger than one is entered in Item 7, Column A.

- Continued -

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Table G.3 (continued)

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3) 1 or 2 is circled in Item 2.

4) At least two of the following are satisfied:
   a) 16 is circled in Item 3, Column B.
   b) 22 is circled in Item 3, Column B.
   c) 25 is circled in Item 3, Column A.

5) At least two of the following are satisfied:
   a) 1 or 2 is circled in Item 12.
   b) 1 or 2 is circled in Item 13.
   c) Any number other than zero "0" is entered for Item 9.

D. Level 4

Classify as Level 4 if the IEP Evaluation Checklist shows that all requirements for Level 3 and all of the following requirements are met.

1) Condition 1 for Level 2, and conditions 3, 4, and 5 for Level 3 are met.

2) For more than 50 percent of the academic/functional areas (1-17) circled in Item 6, Column C, a number other than zero also is entered in Item 6, Column E and in Item 7, Column A.

3) For more than 90 percent of the academic/functional areas (1-17) for which a number other than zero is entered in Item 6, Column E, a number larger than one is entered in Item 7, Column A.

4) The total of all numbers entered in Item 7, Column B, Subitems 1-17 equals at least 25 percent of the total of all numbers entered in Item 7, Column A, subitems 1-17.

5) At least two of the following are satisfied:
   a) 1 is circled in Item 3, Column B.
   b) 2 is circled in Item 3, Column B.
   b) 15 is circled in Item 3, Column B.

6) If a number other than zero is entered for Item 9, the [(number listed in Item 8.a x 2) + (number entered in Item 8.c) + (number entered in Item 8.d)] ÷ 9 ÷ (percent listed in Item 9) = 4 or more. (If minutes per week are listed in Item 9, compute percentage based on a 1,500-minutes week.) If a number other than zero is not entered for Item 9, the [(number listed in Item 8.a x 2) + (number entered in Item 8.c) + (number entered in Item 8.d)] ÷ 9 ÷ .50 = 2 or more.

Section 602 of the Education for all Handicapped Children Act of 1975 (P.L. 94-142).[2]

More specifically, a Level 1, or Incomplete Information, IEP did not include one or more of the following:

(1) Some statement that indicates at least the general nature of an educational need.

(2) An annual goal (or a statement that could be interpreted as representing an annual goal).

(3) A short-term objective (or a statement that could be interpreted as representing a short-term objective).

(4) Some indication of (a) the beginning date of service; (b) the anticipated duration of service; or, (c) in lieu of either "a" or "b," the extent to which the student would participate in the regular education program. (Any date, even the date the IEP was prepared, date of committee meeting, or a date with no indication of its intent satisfied the requirements for part "a." An end-of- service date, a proposed IEP review date, or simply a notation on the form that the goals are "annual" goals satisfied the requirements of part "b." A statement that the IEP was, for example, for the 1977-78 school year, satisfied the requirements of both "a" and "b." Either the proportion of time or amount of time that the student was expected to spend in the regular education program [or in the special education setting] met the requirements of part "c.")

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[2] The Act states that a handicapped child's IEP shall include "(A) a statement of the present levels of educational performance of such child, (B) a statement of annual goals, including short-term instructional objectives, (C) a statement of the specific educational services to be provided to such child, and the extent to which such child will be able to participate in regular educational programs, (D) the projected date for initiation and anticipated-duration of such services, and (E) appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether instructional objectives are being achieved."

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B. Level 2 IEP: Minimally Informative Document

The distinguishing feature of a Level 2, or Minimally Informative, IEP was that it did, when generous assumptions were made, contain most[3] of the data mandated by Section 602 of the Act. Since a Level 2 IEP contained annual goals and short-term objectives, it could be useful for providing information to parents regarding their child's program; however, a Level 2 IEP (1) contained little if any pertinent data that were not specifically mandated, (2) only marginally presented the mandated data, and (3) may or may not have been internally consistent.

C. Level 3 IEP: Informative and Internally Consistent Document

A Level 3, or Informative and Internally Consistent, IEP exceeded a Level 2 document in that it (1) required fewer assumptions to be made regarding the inclusion of the data mandated by Section 602 of the Act, (2) contained a limited amount of critical but not mandated information, and (3) maintained some degree of internal consistency. Thus, while a Level 3 IEP could be useful for monitoring purposes, it was not considered to be sufficiently detailed for teacher programming.

More specifically, a Level 3 IEP contained:

(1) A more precise statement of beginning date and duration of service.

(2) More than one short-term objective for more than half of the academic/ functional areas for which annual goals were included.

(3) A space for parental approval of the IEP and a listing of the participants in the IEP process; or, in lieu of one of these requirements, a listing of the personnel responsible for providing the special education services.

(4) At least one instance of a short-term objective that related to an annual goal that related to an area of indicated need.

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[3] While the Act requires the inclusion of the beginning date of service, the anticipated duration of service, and the extent to which the student would participate in the regular education program, a Level 2 IEP might fail to include one of these three items of information. Also, the Act requires criteria, procedures, and schedules for evaluating the short-term objectives. These items of information were required for a Level 2 IEP only to the extent that they were implied in the short-term objectives.

D. Level 4 IEP: Exceptionally Informative and Internally Consistent Document

A Level 4, or Exceptionally Informative and Internally Consistent, IEP exceeded a Level 3 IEP in that it (1) contained additional important but not mandated information, (2) maintained a higher level of internal consistency, (3) contained more complete evaluation criteria for evaluating the short-term objectives, and (4) contained a certain minimum number of short-term objectives.

More specifically, a Level 4 IEP contained:

(1) The student's age and grade level; or, in lieu of one of these, the rationale for the student's placement.

(2) At least one annual goal and one short-term objective for more than 50 percent of the academic/functional areas where a need was indicated.

(3) More than one short-term objective for more than 90 percent of the academic/functional areas for which annual goals were included.

(4) Evaluation criteria for at least 25 percent of the short-term objectives.

(5) At least two short-term objectives per month of full-time equivalency of special education.[4]

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[4] While there is no need or requirement for the inclusion in IEPs of massive numbers of short-term objectives, there is a need for a sufficient number of objectives to provide appropriate "benchmarks" for describing anticipated progress toward meeting the annual goals. While a simple count of short-term objectives provides one measure, this measure is not particularly meaningful for a specific IEP unless it is considered along with time. Computation of the number of short-term objectives per month of full-time equivalency of special education is a means of including the time factor with the number of objectives. One objective per month of full-time equivalency is defined as one objective intended to be worked on for a period of one month by a handicapped student in a full-time (300 minutes per day, five days per week) special education program.

Since the IEP survey took place in the spring of 1979, the means for calculating the number of objectives per month of full-time equivalency was to add the number of short-term objectives that began anytime during the first half of the year (January 15 or later) to two times the number of objectives that both began and ended during the first half of the year (the assumption being that there likely would be an equal number developed for the last half of the year). This total was divided by nine (assuming a nine-month school year) to give the average number of objectives per month. This number was then divided by the percent of time that special education was received, to give the final objectives per month of full-time equivalency. The formula is:

(no. of "annual" objectives + [2 x no. of first-half-of-year-only objectives]) ÷ 9 ÷ % time that services are received.

IV. INFORMATIVENESS/INTERNAL CONSISTENCY LEVELS OF IEPs FOR THE BASIC SURVEY POPULATION

The distribution of Basic Survey IEPs over the four informativeness/internal consistency levels was as portrayed in Figure G.1. As is indicated, the majority (71 percent) of the IEPs fell into the Level 2 and Level 3 categories; that is, they included the more critical information mandated by the Act but could not be considered exceptionally informative and internally

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[4] (continued)
Following are several examples:
(1) Assume there were 18 objectives scheduled as follows:
2 objectives to begin September 1 and end October 1,
2 objectives to begin October 1 and end November 1,
2 objectives to begin November 1 and end December 1,
2 objectives to begin December 1 and end January 1,
2 objectives to begin January 1 and end February 1,
2 objectives to begin February 1 and end March 1,
2 objectives to begin March 1 and end April 1,
2 objectives to begin April 1 and end May 1, and
2 objectives to begin May 1 and end June 1.
The student was assigned to special education 50 percent of the time.
2 objectives x 1 began January 1 [first half of year], ended February 1 [second half of year] = 2.
8 objectives x 2 (began and ended prior to January 15) = 16
16 + 2 = 18.
18 ÷ 9 = 2 (average of 2 objectives per month).
2 ÷ 50% = 4 (two objectives half-time is the same as four objectives full-time).
This is equal to 4 objectives per month of full-time equivalency.
(2) Assume one objective began in October and ended in December, one began in October and ended in May, and one began in February and ended in May. The student received service one hour (fifty minutes) per day.
1 x 2 = 2 (first half of year).
1 x 1 = 1 (full year).
Second-half-of-year objectives are not counted since they ordinarily would not have been developed by the spring date when the survey began. (If they were developed, there would be 1 objective for the last half of the year plus 1 objective for the first half of the year x 1 = 2, which is exactly what we have on line 1 above.)
2 + 1 = 3.
3 ÷ 9 months = .33.
.33 ÷ 1/6 = 2.
The number of objectives per month of full-time equivalency is 2.

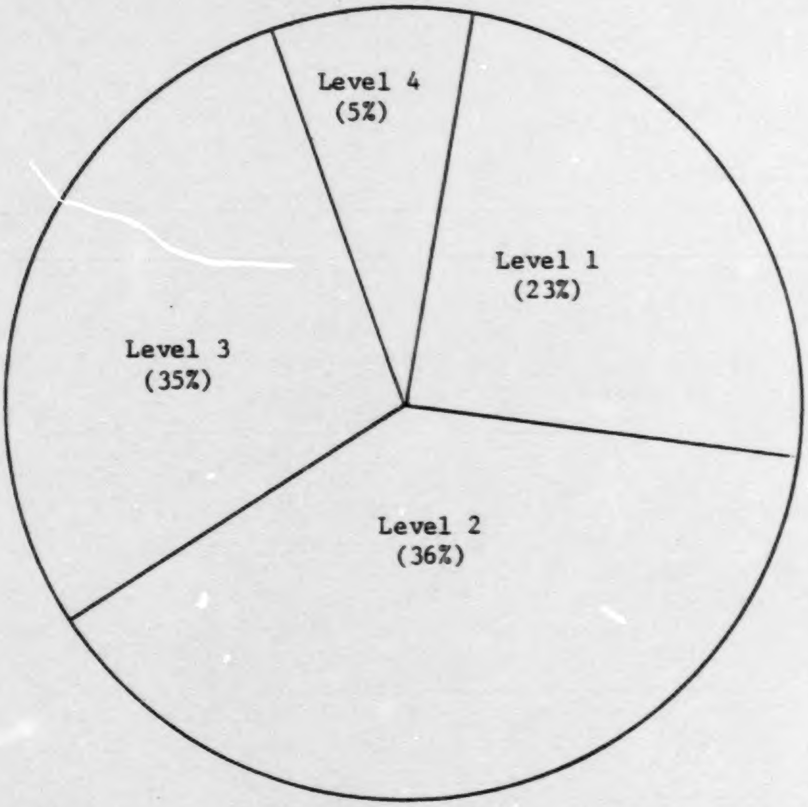

Figure G.1. Distribution of IEPs Over the Four Levels.[1,2]

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[1] Numbers do not equal 100 percent because of rounding.

[2] Standard errors are: Level 1, 2.3; Level 2, 2.0; Level 3, 2.2; Level 4, approximately 0.9.

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consistent. This would appear to reflect a strong tendency to follow the letter of the law but to provide only minimal information beyond that.

An analysis of why IEPs failed to reach the next higher level indicated the following:

(a) Level 1 IEPs failed to meet Level 2 criteria primarily in that:
- 49 percent did not include present-level-of-functioning information.
- 24 percent did not include annual goals.
- 39 percent did not include short-term objectives.

(b) Level 2 IEPs failed to meet Level 3 criteria primarily in that:
- 56 percent failed to include at least two short-term objectives for more than 50 percent of the academic/functional areas for which an annual goal was listed.
- 35 percent failed to include at least two of the following:
  (1) Personnel responsible for services.
  (2) Participants in the IEP process.
  (3) Space for parental approval.
- 28 percent failed to include at least two of the following:
  (1) Beginning date of service.
  (2) Anticipated duration of service.
  (3) Proportion of time in regular programs.

(c) Level 3 IEPs failed to meet Level 4 criteria primarily in that:
- 35 percent failed to include goals and objectives for more than 50 percent of the academic/functional areas where a need was indicated.
- 25 percent failed to include at least two short-term objectives for more than 90 percent of the academic/functional areas for which an annual goal was listed.
- 60 percent failed to provide evaluation criteria for evaluating at least 25 percent of the short-term objectives.
- 48 percent failed to include at least two of the following:
  (1) Student's age.
  (2) Student's grade level.
  (3) Rationale for placement.
- 32 percent did not include the required number of short-term objectives.

Perhaps the simplest approach to summarizing the major potential areas for improvement in the IEPs, based on the analyses discussed in this chapter, is to note the six major conditions that prevent 95 percent of the IEPs from being considered exceptionally informative and interally consistent documents. Following is a brief discussion of these conditions.

(a) A major determinant of the types of information entered in IEPs was the IEP format. As was portrayed in Figure G.1, 95 percent of the IEPs failed to include some information considered desirable for an exceptionally informative and internally consistent IEP (e.g., such information as present level of performance, annual goals, short-term objectives, beginning date of service, anticipated duration of service, percent of time in regular program, personnel responsible for services). In a major portion (perhaps 90 percent) of these cases, based on data from Chapter 4, the IEP format did not include a heading requesting the information. In summary, the IEP format is a powerful determinant of provided information.

(b) In 50 percent of the IEPs, evaluation criteria was provided for fewer than 25 percent of the short-term objectives. In only 43 percent of the IEPs were evaluation criteria included for at least 50 percent of the objectives. These data indicated that the lack of completeness of short-term objective statements was a major shortcoming of IEPs.

(c) Fifty-six percent of the IEPs failed to include annual goals and short-term objectives for more than 50 percent of the academic/functional areas where a special education need was indicated. While it would be expected that some needs would not necessarily be addressed because of priority needs in other areas, provision of special education services in no more than half of the areas of indicated need appeared to represent a deficiency either in the IEPs or in the services actually provided.

(d) Forty-two percent of the IEPs did not include at least two short-term objectives per month of full-time equivalency of special education. While there is no need or requirement for IEPs to include massive numbers of short-term objectives, almost half of the IEPs had such a small number of objectives (in relationship to duration of time covered and proportion of time that the student will be served) that appropriate "benchmarks" for meeting the annual goals could not be considered to be included.

(e) Forty-one percent of the IEPs did not provide evidence of a thorough evaluation of present level of functioning (as evidenced by the inclusion of supporting data, e.g., test data, for at least three academic/functional areas, or an indication that an evaluation was made in at least one area where special education was found not to be needed).

(f) Thirty-six percent of the IEPs did not list at least two short-term objectives for at least 50 percent of the academic/functional areas where an annual goal was listed. This was another indication that a sufficient number of short-term objectives often was not provided.

V. CORRELATIONS BETWEEN IEP LEVEL AND SELECTED STUDENT, SCHOOL, AND SCHOOL DISTRICT VARIABLES

Several types of multiple-regression analyses were performed to investigate the relationships between the IEP informativeness/consistency levels[5] and the following student, school, and school district variables (these variables are defined in Appendix I):

A. Student Variables

1) Nature of student's handicap (mentally retarded, learning disabled, emotionally disturbed, speech impaired, deaf or hard of hearing, orthopedically impaired, visually handicapped, other health impaired).
2) Severity of student's handicapping condition (mild, moderate, severe).
3) Student's age.
4) Student's race.

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[5] When the analyses discussed in this and the following section were performed, the Level 4 IEPs were divided into two levels, one level which met the criteria previously discussed and one level which met a more stringent criteria. Because of the small size of these two levels, they were combined in all of the other analyses. It is considered highly improbable that the use of two levels resulted in any findings that would have been significantly different had the one level been used.

B. School Variables

1) Type of school (regular, special).
2) School grade/age-level organization (elementary, secondary, elementary/secondary).
3) School community location (rural, small city, urban, suburban).
4) School enrollment (small, medium, large).
5) School handicapped/total enrollment ratio (low, medium, high).

C. School District Variables

1) School district size (e.g., small, medium, large).
2) Level of school district per-pupil expenditure (e.g., low, medium, high).

Various combinations of these variables were used to "model" or represent the classification levels. These models were selected by a regression program that selected the best model with one variable, the best with two variables, etc., until all the variables were included simultaneously. Using the usual measures of model fit (e.g., weighted multiple correlation coefficients), none of the attempted models provided evidence of strong explanatory power. That is, there was no significant correlation with the informativeness/consistency levels and any of these variables, singly or in all possible combinations. These results are supported by the one-way tabulations discussed in the next section.

These findings were unexpected and indicated that the informativeness/consistency levels are more a function of other unknown dimensions, perhaps those associated with the characteristics of the personnal primarily responsible for preparing the IEPs; e.g., their background training and experience and their attitude toward the IEP requirement.

VI. INFORMATIVENESS/INTERNAL CONSITENCY LEVELS OF IEPs FOR VARIOUS SUBPOPULATIONS

The percents of IEPs in each of the informativeness/consistency levels were computed for the following variables: (a) student race, age, and nature of handicapping condition; and (b) Table E.4 presents the levels by school type, school grade-level organization, and size of school district enrollment.

The findings supported the results presented in Section IV above in that there was little variation across reporting groups in the percent of IEPs in each of the levels. The few statistically significant differences that were noted between the groups did not indicate any discernable trends.

VII. SUMMARY

While only five percent of the Basic Survey IEPs could be considered to be exceptionally informative and internally consistent documents under the criteria used in these analyses, 77 percent met most of the requirements of the Act. All of the IEPs met at least part of the requirements of the Act.

The major potential areas for improvement in IEPs, based on the analyses discussed in this chapter, are:

a) Inclusion of headings in the IEP format under which to enter mandated information (e.g., beginning date of service, proposed duration of service).

b) Inclusion of headings in the IEP format under which to enter nonmandated but important information (e.g., age, grade level, rationale for placement, parental approval, personnel responsible for services, participants in the IEP process).

c) Inclusion of criteria for evaluating short-term objectives (either by writing the objectives in measurable terms or by including the evaluation criteria elsewhere in the IEP).

d) Provision of annual goals and short-term objectives for a larger proportion of the areas where needs are indicated.

e) Inclusion of sufficient number of short-term objectives to provide appropriate "benchmarks" of progress toward meeting the annual goals.

f) Provision of more complete information regarding present level of functioning.

An analysis was conducted of the relationships between the descriptive levels and four student variables (nature of handicap, severity of handicap, age, and race), five school variables (type, grade-level organization, community location, size, and handicapped/total environment ratio), and two school district variables (size and per-pupil expenditure level). This effort indicated that there was no significant correlation between the levels and all possible combinations of these variables.

Appendix H

Supporting Data for Chapter 8

Table H.1

DISTRIBUTION OF STUDENTS ENROLLED IN REGULAR SCHOOLS, BY TYPES OF SPECIAL EDUCATION INSTRUCTIONAL SETTINGS WITHIN THE SCHOOL AND AGE LEVELS

(In percents, with standard errors noted in parentheses)

Type of Setting	Student Age Levels[a/]				Total
	3-5	6-12	13-15	16-21	
Regular Class Only	0.0 (0.0)*	1.2 (0.6)*	0.8 (0.4)*	2.2 (0.9)*	1.2 (0.4)
Resource Room Only[b/]	40.4 (8.7)	67.3 (2.7)	54.6 (4.0)	49.3 (4.0)	61.5 (2.4)
Self-Contained Class Only[b/]	29.7 (9.3)	19.7 (2.2)	25.2 (3.5)	26.0 (3.5)	22.0 (2.0)
Other Only[b/],[c/]	9.4 (7.3)*	5.5 (1.2)*	9.8 (2.5)*	7.2 (1.7)*	6.7 (0.9)
Resource Room, Self-Contained Class Only[b/]	9.7 (7.5)*	2.7 (0.8)*	3.9 (1.6)*	3.7 (1.6)*	3.3 (0.8)
Resource Room, Other Only[b/]	0.0 (0.0)*	2.3 (0.5)*	2.9 (0.8)*	3.5 (1.0)*	2.5 (0.4)
Self-Contained Class, Other Only[b/]	0.0 (0.0)*	0.9 (0.4)*	2.0 (0.9)*	7.9 (2.0)*	2.0 (0.5)
Resource Room, Self-Contained Class, Other[b/]	10.9 (10.4)*	0.3 (0.2)*	0.0 (0.0)*	0.0 (0.0)*	0.6 (0.4)*
Undetermined	0.0 (0.0)*	0.1 (0.1)*	0.6 (0.3)*	0.3 (0.3)*	0.2 (0.1)*
Total	100.0[d/]	100.0[d/]	100.0[d/]	100.0[d/]	100.0[d/]

* Cell has an estimated sample size of less than 25.

a/ Percents are based on column estimated population totals for students enrolled in regular schools, adjusted for nonresponse.

b/ The regular classroom may or may not have been included.

c/ "Other" settings include hospital or homebound programs, work study programs, vocational/prevocational skills centers, special physical education.

d/ Detail does not add to total because of rounding.

Table H.2

DISTRIBUTION OF STUDENTS ENROLLED IN REGULAR SCHOOLS, BY TYPES OF SPECIAL EDUCATION INSTRUCTIONAL SETTINGS WITHIN THE SCHOOL AND LEVEL OF HANDICAPPING SEVERITY

(In percents, with standard errors noted in parentheses)

Type of Setting	Level of Handicapping Severity[a] Mild	Moderate	Severe	Total
Regular Class Only	1.3 (0.6)*	1.2 (0.6)*	0.6 (0.4)*	1.2 (0.4)
Resource Room Only[b]	61.8 (2.6)	64.8 (3.4)	51.0 (4.9)	61.5 (2.4)
Self-Contained Class Only[b]	23.3 (2.5)	18.7 (2.5)	25.6 (3.8)	22.0 (2.0)
Other Only[b],[c]	7.0 (1.2)*	5.0 (1.1)*	10.5 (3.2)*	6.7 (0.9)
Resource Room, Self-Contained Class Only[b]	1.8 (0.7)*	5.2 (1.7)*	4.6 (1.5)*	3.3 (0.8)
Resource Room, Other Only[b]	1.8 (0.4)*	2.4 (0.6)*	5.6 (1.4)*	2.5 (0.4)
Self-Contained Class, Other Only[b]	2.4 (0.7)*	1.3 (0.6)*	1.9 (0.9)*	2.0 (0.5)
Resource Room, Self-Contained Class, Other[b]	0.2 (0.2)*	1.2 (1.1)*	0.3 (0.3)*	0.6 (0.4)*
Undetermined	0.4 (0.2)*	0.0 (0.0)*	0.0 (0.0)*	0.2 (0.1)*
Total	100.0[d]	100.0[d]	100.0[d]	100.0[d]

* Cell has an estimated sample size of less than 25.

[a] Percents are based on column estimated population totals for students enrolled in regular schools, adjusted for nonresponse.

[b] The regular classroom may or may not have been included.

[c] "Other" settings include hospital or homebound programs, work study programs, vocational/prevocational skills centers, special physical education.

[d] Detail does not add to total because of rounding.

Table H.3

DISTRIBUTION OF STUDENTS ENROLLED IN REGULAR SCHOOLS, BY TYPES OF SPECIAL EDUCATION INSTRUCTIONAL SETTINGS WITHIN THE SCHOOL AND TYPE OF HANDICAPPING CONDITION

(In percents, with standard errors noted in parentheses)

	Type of Handicapping Condition[a]									
Instructional Settings	Mentally Retarded	Learning Disabled	Emotionally Disturbed	Speech Impaired	Deaf/Hard of Hearing	Ortho-pedically Impaired	Visually Handicapped	Other Health Impaired[c]	Multiple Conditions	Total
Regular Class Only	0.4 (0.4)*	1.9 (0.8)*	2.1 (1.4)*	0.9 (0.7)*	0.0 (0.0)*	15.1(11.1)*	0.0 (0.0)*	2.2 (1.9)*	0.1 (0.1)*	1.2 (0.4)
Resource Room Only[b]	34.9 (3.7)	76.9 (2.6)	40.2 (6.7)	88.8 (2.5)	8.2 (5.9)	0.0 (0.0)	16.9(15.9)	35.3 (7.9)	37.6 (4.1)	61.5 (2.4)
Self-Contained Class Only[b]	47.2 (4.0)	12.1 (2.2)	31.1 (5.9)	4.8 (1.5)	68.2(12.8)	50.2(22.4)	0.0 (0.0)*	27.2 (7.3)	32.5 (4.5)	22.0 (2.0)
Other Only[b],[c]	7.1 (2.7)*	4.0 (1.1)*	11.4 (4.5)*	3.7 (1.3)*	18.7(11.2)	34.7(22.8)	48.3(23.7)	26.2 (7.8)	7.1 (1.9)*	6.7 (0.9)
Resource Room, Self-Contained Class Only[b]	4.1 (1.9)*	1.5 (1.0)*	1.4 (1.3)*	0.3 (0.2)*	0.0 (0.0)*	0.0 (0.0)*	34.8(25.4)*	0.0 (0.0)*	11.9 (2.7)*	3.3 (0.8)
Resource Room, Other Only[b]	1.2 (0.6)*	2.3 (0.6)*	9.5 (4.3)*	[illegible].2 (0.6)*	4.9 (3.6)*	0.0 (0.0)*	0.0 (0.0)*	3.7 (2.3)*	4.9 (1.3)*	2.5 (0.4)
Self-Contained Class, Other Only[b]	4.8 (1.3)*	0.5 (0.3)*	4.3 (2.3)*	0.4 (0.4)*	0.0 (0.0)*	0.0 (0.0)*	0.0 (0.0)*	4.7 (2.7)*	3.1 (1.3)*	2.0 (0.5)
Resource Room, Self-Contained Class, Other[b]	0.2 (0.2)*	0.3 (0.3)*	0.0 (0.0)*	0.0 (0.0)*	0.0 (0.0)*	0.0 (0.0)*	0.0 (0.0)*	0.0 (0.0)*	2.8 (2.5)*	0.6 (0.4)*
Undetermined	0.1 (0.1)*	0.5 (0.3)*	0.0 (0.0)*	0.0 (0.0)*	0.0 (0.0)*	0.0 (0.0)*	0.0 (0.0)*	0.8 (0.8)*	0.0 (0.0)*	0.2 (0.1)*
Total	100.0[d]	100.0[d]	100.0[d]	100.0[d]	100.0[d]	100.0[d]	100.0[d]	100.0[d]	100.0[d]	100.0[d]

* Cell has an estimated sample size of less than 25.

[a] Percents are based on column estimated population totals for students enrolled in regular schools, adjusted for nonresponse.

[b] The regular classroom may or may not have been included.

[c] "Other" settings include hospital or homebound programs, work study programs, vocational/prevocational skills centers, special physical education.

[d] Detail does not add to total because of rounding.

Table H.4

DISTRIBUTION OF STUDENTS ENROLLED IN REGULAR SCHOOLS, BY TYPES OF SPECIAL EDUCATION INSTRUCTIONAL SETTINGS WITHIN THE SCHOOL AND DISTRICT PER-PUPIL EXPENDITURE LEVELS

(In percents, with standard errors noted in parentheses)

Type of Setting	Per-Pupil Expenditure Levels[a/]			Total
	Low	Medium	High	
Regular Class Only	0.2 (0.2)*	0.8 (0.3)*	2.6 (1.2)*	1.2 (0.4)
Resource Room Only[b/]	72.9 (3.2)	64.9 (2.9)	47.7 (5.2)	61.5 (2.4)
Self-Contained Class Only[b/]	16.8 (2.6)	17.4 (2.1)	32.2 (4.7)	22.0 (2.0)
Other Only[b/],[c/]	4.3 (1.5)*	8.2 (1.4)*	6.7 (2.1)*	6.7 (0.9)
Resource Room, Self-Contained Class Only[b/]	2.2 (0.9)*	3.1 (1.0)*	4.8 (1.9)*	3.3 (0.8)
Resource Room, Other Only[b/]	2.6 (0.9)*	2.9 (0.7)*	1.8 ([illegible].8)*	2.5 (0.4)
Self-Contained Class, Other Only[b/]	0.8 (0.5)*	2.0 (0.8)*	2.9 (1.1)*	2.0 (0.5)
Resource Room, Self-Contained Class, Other[b/]	0.2 (0.2)*	0.3 (0.3)*	1.2 (1.2)*	0.6 (0.4)*
Undetermined	0.1 (0.1)*	0.4 (0.2)*	0.1 (0.1)*	0.2 (0.1)*
Total	100.0[d/]	100.0[d/]	100.0[d/]	100.0[d/]

* Cell has an estimated sample size of less than 25.

[a/] Percents are based on column estimated population totals for students enrolled in regular schools, adjusted for nonresponse.

[b/] The regular classroom may or may not have been included.

[c/] "Other" settings include hospital or homebound programs, work study programs, vocational/prevocational skills centers, special physical education.

[d/] Detail does not add to total because of rounding.

Table H.5

MEAN NUMBER OF SPECIAL EDUCATION INSTRUCTIONAL HOURS THAT STUDENTS ENROLLED IN REGULAR SCHOOLS RECEIVED PER WEEK IN RESOURCE ROOMS, IN SELF-CONTAINED CLASSROOMS, AND IN ALL SPECIAL SETTINGS OTHER THAN THE REGULAR CLASSROOM, BY AGE LEVELS

(Standard errors are noted in parentheses)

Type of Setting by Mean, Standard Deviation of the Population, and Sample Size	Student Age Levels				Total Ages 3-21
	3-5	6-12	13-15	16-21	
Resource Room:					
Mean[a/]	1.2 (0.1)	4.5 (0.4)	7.3 (0.4)	7.7 (0.5)	5.2 (0.3)
Standard Deviation	0.5	5.7	5.5	5.6	5.8
Sample Size	25.0	802.0	345.0	252.0	1424.0
Self-Contained Classroom:					
Mean[a/]	11.0 (1.1)	23.6 (0.7)	17.4 (1.1)	17.7 (1.2)	20.4 (0.6)
Standard Deviation	5.0	8.5	8.5	9.1	9.2
Sample Size	18.0	240.0	167.0	155.0	580.0
Special Settings Other Than Regular Classroom:					
Mean[a/]	6.6 (1.4)	9.3 (0.6)	11.8 (0.7)	13.2 (0.9)	10.2 (0.5)
Standard Deviation	6.7	10.6	8.8	9.9	10.2
Sample Size	41	1069.0	539.0	434.0	2081.0

[a/] Means for each cell are based on the number of students who received any special education instruction in the indicated setting.

Table H.6

MEAN NUMBER OF SPECIAL EDUCATION INSTRUCTIONAL HOURS THAT STUDENTS LED IN REGULAR SCHOOLS RECEIVED PER WEEK IN RESOURCE ROOMS, IN SELF-CONTAINED CLASSROOMS, AND IN ALL SPECIAL SETTINGS OTHER THAN THE REGULAR CLASSROOM, BY TYPE OF HANDICAPPING CONDITIONS

(Standard errors are noted in parentheses)

Type of Setting by Mean Standard Deviation of the Population and Sample Size	Type of Handicapping Condition									
	Mentally Retarded	Learning Disabled	Emotionally Disturbed	Speech Impaired	Deaf/Hard of Hearing	Orthopedically Impaired	Visually Handicapped	Other Health Impaired[a]	Multiple Conditions	Total
Resource Room:										
Mean[b]	12.1 (1.3)	6.2 (0.3)	7.8 (1.3)	1.4 (0.2)	2.8 (0.8)	0.0 (0.0)	4.6 (3.4)	5.4 (0.9)	5.6 (0.5)	5.2 (0.3)
Standard Deviation	8.2	4.5	6.4	2.4	1.7	0.0	5.2	4.1	5.9	5.8
Sample Size	189.0	579.0	45.0	374.0	4.0	0.0	2.0	42.0	189.0	1424.0
Self-Contained Classroom:										
Mean[b]	23.3 (0.7)	18.8 (1.6)	21.2 (1.6)	4.1 (1.7)	16.7 (2.9)	8.8 (3.5)	20.0 (0.0)	19.8 (3.1)	20.9 (1.1)	20.4 (0.6)
Standard Deviation	8.0	8.7	7.7	6.9	8.0	8.0	0.0	9.8	8.1	9.2
Sample Size	238.0	93.0	32.0	26.0	11.0	3.0	1.0	25.0	151.0	580.0
All Special Settings Other Than Regular Classroom:										
Mean[b]	20.2 (0.7)	8.4 (0.5)	13.0 (1.2)	1.6 (0.2)	12.2 (2.5)	5.6 (2.6)	10.3 (4.4)	10.4 (2.1)	14.8 (0.9)	10.2 (0.5)
Standard Deviation	9.8	7.2	9.7	3.0	9.4	7.3	8.6	10.5	10.2	10.2
Sample Size	446.0	702.0	84.0	411.0	18.0	5.0	5.0	83.0	327.0	2081.0

[a] Other incudes conditions as epilepsy and neurological impairment.

[b] Means for each cell are based on the number of students who received any special education instruction in the indicated setting.

Table H.7

MEAN NUMBER OF SPECIAL EDUCATION INSTRUCTIONAL HOURS THAT STUDENTS ENROLLED IN REGULAR SCHOOLS RECEIVED PER WEEK IN RESOURCE ROOMS, IN SELF-CONTAINED CLASSROOMS, AND IN ALL SPECIAL SETTINGS OTHER THAN THE REGULAR CLASSROOM, BY LEVEL OF HANDICAP SEVERITY

(Standard errors are noted in parentheses)

Type of Setting by Mean, Standard Deviation of the Population, and Sample Size	Level of Handicapping Severity			
	Mild	Moderate	Severe	Total
Resource Room:				
Mean[a]	5.2 (0.5)	5.0 (0.4)	5.8 (0.6)	5.2 (0.3)
Standard Deviation	5.9	5.6	5.9	5.8
Sample Size	738.0	511.0	175.0	1424.0
Self-Contained Classroom:				
Mean[a]	21.0 (0.8)	20.2 (1.0)	18.6 (1.5)	20.4 (0.6)
Standard Deviation	9.5	8.8	8.9	9.2
Sample Size	336.0	168.0	76.0	580.0
All Special Settings Other Than Regular Classroom:				
Mean[a]	10.5 (0.6)	9.6 (0.6)	10.6 (0.5)	10.2 (0.5)
Standard Deviation	10.7	9.6	9.5	10.2
Sample Size	1136.0	688.0	257.0	2081.0

[a] Means for each cell are based on the number of students who received any special education instruction in the indicated setting.

Table H.8

MEAN NUMBER OF SPECIAL EDUCATION INSTRUCTIONAL HOURS THAT STUDENTS ENROLLED IN REGULAR SCHOOLS RECEIVED PER WEEK IN RESOURCE ROOMS, SELF-CONTAINED CLASSROOMS, AND IN ALL SPECIAL SETTINGS OTHER THAN THE REGULAR CLASSROOM, BY DISTRICT PER-PUPIL EXPENDITURE

(Standard errors are noted in parentheses)

Type of Setting by Mean, Standard Deviation of the Population, and Sample Size	Per-Pupil Expenditure Levels			Total
	Low	Medium	High	
__Resource Room:__				
Mean[a]	5.6 (0.8)	5.2 (0.8)	4.8 (0.5)	5.2 (0.3)
Standard Deviation	6.3	5.9	4.9	5.8
Sample Size	392.0	659.0	368.0	1424.0[b]
__Self-Contained Classroom:__				
Mean[a]	21.3 (1.3)	20.2 (1.0)	20.1 (1.0)	20.4 (0.6)
Standard Deviation	8.8	9.6	9.2	9.2
Sample Size	120.0	223.0	232.0	580.0[b]
__All Special Settings Other Than Regular Classroom:__				
Mean[a]	9.2 (0.8)	9.4 (0.7)	12.1 (0.9)	10.2 (0.5)
Standard Deviation	9.7	9.8	10.8	10.2
Sample Size	527.0	927.0	617.0	2081.0[b]

[a] Means for each cell are based on the number of students who received any special education instruction in the indicated setting.

[b] Low, medium, and high sample sizes do not equal total because students in two districts of undetermined per-pupil expenditure are included in totals.

Table H.9

PERCENT OF HANDICAPPED STUDENTS SERVED ON A PULLOUT BASIS, BY REGULAR AND SPECIAL SCHOOLS*

(Standard errors are noted in parentheses)

	Regular Schools	Special Schools	Total
Resource Room	1.5 (1.2)	0.3 (0.3)	1.5 (1.1)
Self-Contained Classroom	0.3 (0.2)	0.7 (0.4)	0.3 (0.2)
Regular Classroom	0	0	0
Hospital	0	0	0
Homebound	0	0	0
Other	0.5 (0.2)	0.6 (0.4)	0.5 (0.2)

* Each cell in this table has a sample of less than 25.

Appendix I

Description of Reporting Variables

Appendix I

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This appendix defines the major reporting variables and groups for the Basic Survey. Unless noted otherwise, all reported n's refer to sample sizes.

A. Type of School: Regular and Special

Principals of the schools in the study classified their schools as one of the following:

1) Regular public school (n = 437).
2) Special public day school (n = 57).
3) Public residential school (n = 4).
4) Other; e.g., sheltered occupational workshop, special private day school, and special residential school, intermediate educational unit (n = 9).

For purposes of this study, schools in categories 2, 3, and 4 are combined and defined as "special" schools. Category 1 schools are defined as "regular" schools.

The number of sample students in each of the regular and special school categories is as follows:

1) Regular schools (n = 2,126).
2) Special schools (n = 531).

B. Student Race: White, Black, Hispanic, and Other

Students in the sample were classified by their teachers in one of the five following racial/ethnical background categories:

1) American Indian or Alaskan Native (n = 38).
2) Asian or Pacific Islander (n = 20).
3) Black, not Hispanic (n = 526).
4) Hispanic (n = 103).
5) White, not Hispanic (n = 1,970).

Because of their small sample sizes for students in categories 1 and 2, these two categories have been combined as an "other" category.

C. Student Sex: Male or Female

Based on data obtained from teachers, the distribution of the sample students when classified by sex is:

1) Male (n = 1,734).
2) Female (n = 923).

D. Nature and Severity of Student Handicapping Condition

The handicapping condition(s) for each child was specified by the child's teacher. The teacher could specify one or more of eight types of handicaps (mentally retarded, learning disabled, emotionally disturbed, speech impaired, deaf and hard of hearing, visually handicapped, orthopedically impaired, and other) for each child. Also, the teacher was asked to assign one of three severity levels (mild, moderate, severe) to each of the specified conditions. Table I.1 shows the number of conditions (not number of students) reported for the sample of 2,657 students.

Using these data reported by teachers, RTI assigned those children for whom more than one condition was noted to a "multiple conditions" category. The highest severity level for any single handicapping condition was assigned

Table I.1

DISTRIBUTION OF HANDICAPPING CONDITIONS, BY NATURE AND SEVERITY

Nature of Condition	Severity of Condition Mild	Moderate	Severe	Total
Mentally Retarded	640	271	70	981
Learning Disabled	442	435	149	1,026
Emotionally Disturbed	110	121	55	286
Speech Impaired	334	266	122	722
Deaf and Hard of Hearing	21	36	42	99
Visually Handicapped	34	32	23	89
Orthopedically Impaired	18	27	14	59
Other Health Impaired	74	54	47	175
Total	1,673	1,242	522	3,437

to these children. For example, a "moderate" learning disability combined with a "severe" visual handicap would be designated as a "severe" multiple condition; a "moderate" learning disability combined with a "moderate" visual handicap would be designated as a "moderate" multiple condition. Several students in the sample had multiple conditions--407 had two conditions, 103 had three conditions, 28 had four conditions, and 11 had five conditions.

As a result, each of the 2,657 students in the sample was assigned to one of the following nine "nature-of-handicapping-condition" categories and one of the following three "severity-of-handicapping-condition" levels:

1) Nature of Handicapping Condition
   a) Mentally retarded (n = 666).
   b) Learning disabled (n = 737).
   c) Emotionally disturbed (n = 122).
   d) Speech impaired (n = 418).
   e) Deaf and hard of hearing (n = 33).
   f) Orthopedically impaired (n = 21).
   g) Visually handicapped (n = 7).
   h) Other health impaired (n = 98).
   i) Multiple conditions (n = 555).
2) Severity of Handicapping Condition
   a) Mild (n = 1,254).
   b) Moderate (n = 981).
   c) Severe (n = 422).

E. Student Age Levels: 3-5, 6-12, 13-15, and 16-21

Teachers specified the age, as of 1 December 1978, of each student in the sample. The following four broad age groupings were formed:

1) 3-5 years (n = 78).
2) 6-12 years (n = 1,290).
3) 13-15 years (n = 653).
4) 16-21 years (n = 636).

These age groupings correspond roughly to the age levels of preschool, elementary school, middle/junior high school, and senior high school students, respectively.

F. School Grade/Age-Level Organization: Elementary, Secondary, and Elementary/Secondary

School principals provided for their schools a range of either grades or student ages. Based on this information all schools were placed in one of the following three categories, using age ranges only when grade levels were not available:

1) Elementary (n = 339)--grades Pre-K-8 or ages 0-14.
2) Secondary (n = 107)--9-12 or ages 15+.
3) Elementary/Secondary (n = 61)--combinations of the grade levels or age ranges that are specified above for elementary and secondary schools.

The number of sample students in each of the grade-age-level organization categories is as follows:

1) Elementary (n = 1,670).
2) Secondary (n = 533).
3) Elementary/Secondary (n = 454).

G. School Type-of-Community Location: Rural, Small City, Urban, and Suburban

Each principal selected from the following list the size and type of community that best described the location of his/her school:

1) Small rural or farming community (n = 104).
2) Small city or town of fewer than 50,000 people that is not a suburb of a city 50,000 or more people (n = 147).
3) City of 50,000 - 200,000 people that is not a suburb of a city 200,000 or more people (n = 79).
4) Suburb of a city of 50,000 - 200,000 people (n = 40).
5) City of 200,000 - 500,000 people that is not a suburb of a city 500,000 or more people (n = 22).
6) Suburb of a city of 200,000 - 500,000 people (n = 16).
7) City of over 500,000 people (n = 44).
8) Suburb of a city over 500,000 people (n = 56).

These eight response categories were collapsed into four type-of-community levels as follows:

1) Rural (n = 104)--Category 1 .
2) Small City (n = 146)--Category 2.

3) Urban (n = 145)--Categories 3, 5, and 7.
4) Suburban (n = 112)--Categories 4, 6, and 8.

The number of sample students in each of these type-of-community levels is as follows:

1) Rural (n = 516).
2) Small City (n = 797).
3) Urban (n = 756).
4) Suburban (n = 588).

H. School Size: Small, Medium, and Large

School enrollment data, as provided by the school principals, were used to categorize each school as small, medium, or large. However, as shown below, the size definitions are dependent on the grade/age level organization of the school.

1) Elementary Schools (grades pre-K-8, or ages 0-14).
    a. Small (n = 102)--Less than 400 students.
    b. Medium (n = 167)--400-800 students.
    c. Large (n = 70)--More than 800 students.
2) Secondary Schools (grades 9-12, or ages 15+).
    a. Small (n = 33)--Less than 950 students.
    b. Medium (n = 48)--950-1650 students.
    c. Large (n = 26)--More than 1650 students.
3) Elementary/Secondary Schools (combinations of above).
    a. Small (n = 23)--Less than 100 students.
    b. Medium (n = 27)--100-300 students.
    c. Large (n = 11)--More than 300 students.

For reporting purposes, the small, medium, and large schools are grouped across the school grade/age level designations; i.e., small = 158, medium = 242, and large = 107. The number of sample students in each of these size categories is as follows:

1) Small (n = 865).
2) Medium (n = 1,260).
3) Large (n = 532).

I. School Handicapped/Total Enrollment Proportion: Low, Medium, and High

For each school in the sample, the ratio of enrolled handicapped students to the total enrollment of students was computed. Since the ratios for special schools were all high (i.e., close to 1), only regular schools were placed into categories based on these ratios as follows:

1) Low (n = 186)--less than 6 percent of total enrollment is handicapped.
2) Medium (n = 141)--6 to 9 percent (inclusive) of the total enrollment is handicapped.
3) High (n = 180)--10 percent or more of the total enrollment is handicapped.

The number of sample students in each of these categories is:

1) Low (n = 892).
2) Medium (n = 700).
3) High (n = 1,065).

J. School District Size: Small, Medium, and Large

The total enrollment of sample school districts was obtained from sampling information provided by the Curriculum Information Center. These figures were used to classify each district into one of three categories:

1) Small (n = 60)--Less than 3,000 students.
2) Medium (n = 73)--3,000-9,999 students.
3) Large (n = 75)--10,000 or more students.

The number of sample students in each of the district size categories is as follows:

1) Small (n = 547).
2) Medium (n = 859).
3) Large (n = 1,251).

Table I.2 shows both the percent of school districts in the nation (as opposed to the sample n's shown above) that fall in each of these categories and the percent of students in the nation that are enrolled in districts in each classification. For example, these data show that although only 5 percent of the school districts are classified by these criteria as being "large," these large districts enroll 45 percent of the nation's students.

Table I.2

PERCENTS OF NATIONAL SCHOOL DISTRICTS AND STUDENT ENROLLMENTS, BY SCHOOL DISTRICT SIZE CATEGORIES[a]

Size Categories	Percent of Districts	Percent of Student Enrollment
Small	77	24
Medium	18	31
Large	5	45
Total	100	100

[a] These data are based on sampling frame information provided by the Curriculum Information Center, Inc., 600 Ross Building, 1726 Champa Street, Denver, Colorado, 80202.

K. School District Geographic Location: Northeast, South, North Central, and West

Each sample school district was classified as belonging to one of the four census regions as follows:

Northeast (n = 47)--CT, ME, MA, NH, NJ, NY, PA, RI, VT.

South (n = 68)--AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV.

North Central (n = 60)--IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI.

West (n = 33)--AZ, CA, CO, ID, MT, NV, OR, UT, WA, WY.

L. Levels of School District Per-Pupil Expenditures: Low, Medium, and High

Superintendents in all but two districts indicated the average per-pupil expenditure in their districts during the 1978-79 school year, including all annual operating expenses from local, state, and federal sources but not including capital outlay. Districts were then classified into three per-pupil expenditure levels as follows:

1) Low (n = 53)--less than $1,250.
2) Medium (n = 93)--$1,250-$1,750.
3) High (n = 60)--More than $1,750.
4) Unknown (n = 2).

The number of sample students in each of the per-pupil expenditure levels is as follows:

1) Low (n = 619).
2) Medium (n = 1,149).
3) High (n = 871).
4) Unknown (n = 18).